DOCUMENT RESUME

ED 049 550 24 EA 003 474

AUTHOR	Foster, Charles W., Ed.
TITLE	Report of the First National Conference on PPBES in Education, June 10, 1969.
INSTITUTION	Association of School Business Officials, Chicago, Ill. Research Corp.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/OE), Washington, D.C.
BUREAU NO	BR-8-0290
PUB DATE	10 Jun 69
GRANT	OEG-0-8-080290-3315(010)
NOTE	113p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$6.58
DESCRIPTORS	Administrative Personnel, Budgeting, Conferences, Educational Administration, Evaluation, Management, *Management Systems, *Program Budgeting, *Program Planning, Resource Allocations, *Speeches

ABSTRACT

This document contains proceedings of a conference that presented a design for applying a program planning-budgeting-evaluating system (PPBES) to educational management. Included are (1) the keynote address, tracing the origin and future of program budgeting; (2) the presentation of the educational management design developed by the Research Corporation of ASBO; and (3) excerpts from a panel discussion session. (RA)

BR-8-0290
PA-24

ED 049 550

REPORT OF

THE FIRST NATIONAL CONFERENCE ON PPBES IN EDUCATION

conducted by

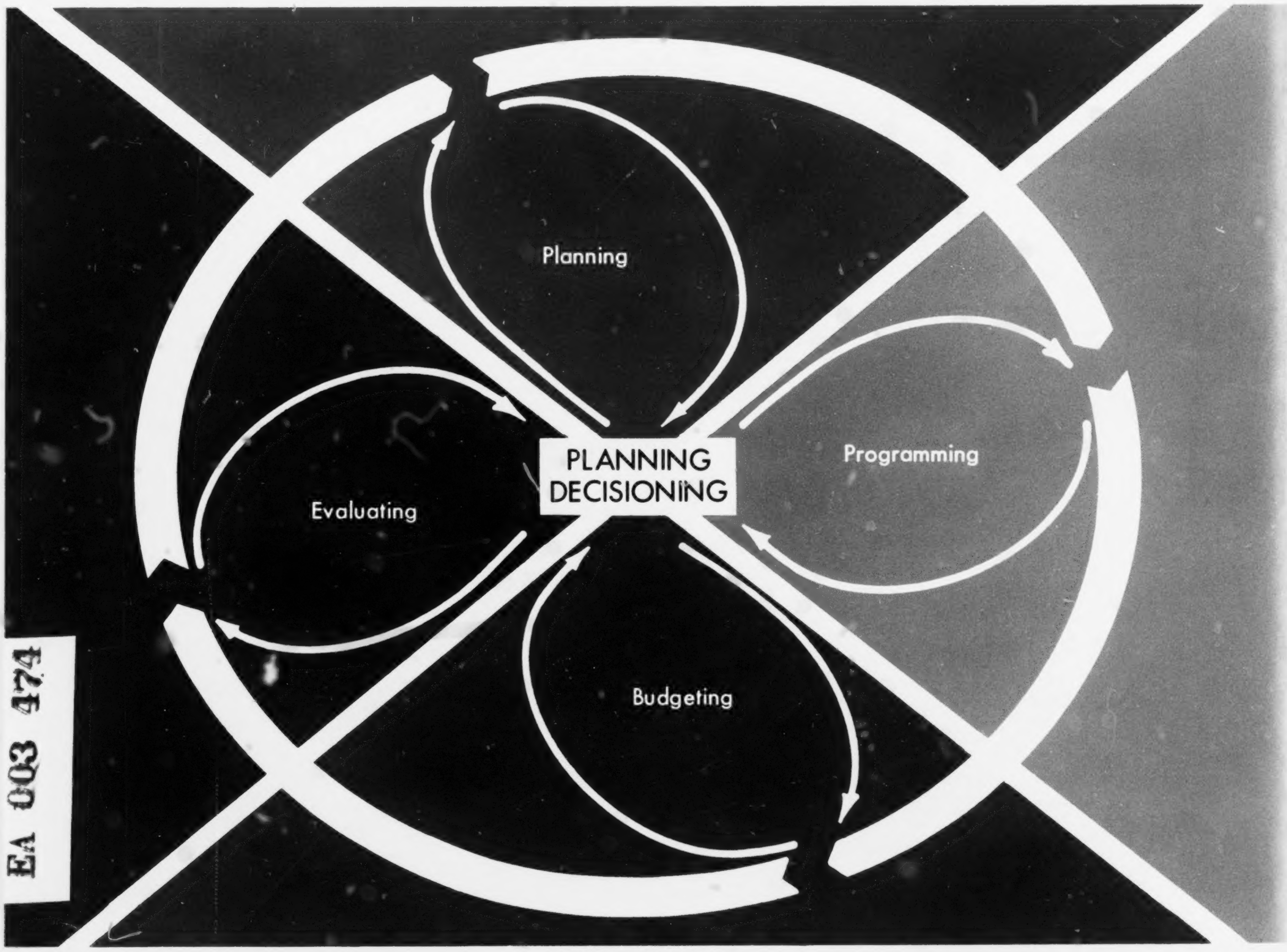
THE RESEARCH CORPORATION

of the

ASSOCIATION OF SCHOOL BUSINESS OFFICIALS

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

EA 003 474



PURSUANT TO
USOE PROJECT NO. 8-0290

"PROJECT TO DEVELOP A PROGRAM PLANNING-BUDGETING-EVALUATION SYSTEM DESIGN FOR LOCAL SCHOOLS," AWARDED TO THE RESEARCH CORPORATION OF THE ASSOCIATION OF SCHOOL BUSINESS OFFICIALS.

This publication is one of a series of progress reports on the research project in Program Planning-Budgeting-Evaluation System Design, Project No. 8-0290; USOE Grant No. OEG-0-8-080290-3315(010) brought to you by the Research Corporation of the Association of School Business Officials.

This report has a selective distribution to those educational administrators who attended the First National Research Conference in Denver, and to those administrators who will be attending the eight regional meetings during the Fall of 1969. It is also available to the interested general public, upon request, as long as the supply lasts.

This report has been approved by the Board of Directors of the Research Corporation of ASBO:

1969 Board of Directors

President
ERNEST C. GRAYSON, M.B.A., R.S.B.O.
Louisville, Kentucky

President Elect
RIDGLEY M. BOGG, Ed.D., R.S.B.A.
Great Neck, New York

Vice President
DALE DOUGLAS, R.S.B.A.
Dallas, Texas

Director – thru 1970
DONALD I. PRYOR, M.A., R.S.B.A.
Edina, Minnesota

Director – thru 1969
HENRY J. BENNINGEN, C.P.A., R.S.B.A.
Winnipeg, Manitoba, Canada

Director – thru 1969
ROBERT W. WALKER, M.A., R.S.B.A.
Lansing, Michigan

Director – thru 1971
GEORGE R. BABIGIAN, R.S.B.A.
Winnetka, Illinois

Director – thru 1971
JOHN W. BOYLE, R.S.B.A.
Kent, Washington

Director – thru 1970
JOHN T. LUCAS, R.S.B.A.
Kettering,Ohio

Executive Committeeman
and Parliamentarian
THOMAS A. LINTON, B.S., R.S.B.A.
Milwaukee,Wisconsin

Executive Secretary, Editor
and Director of Research
CHARLES W. FOSTER, Ed.D., R.S.B.A.
Chicago, Illinois

THE RESEARCH CORPORATION of the Association of School Business Officials is an educational research organization, devoted to the development and improvement of selected areas of school business management and publishing information and research about them. Additional information about either ASBO or its Research Corporation is available from:

Dr. Charles W. Foster, R.S.B.A., Director of Research
Research Corporation of ASBO
2424 West Lawrence Avenue
Chicago, Illinois 60625
U. S. A.

Telephone: Area Code 312; 728-3204

ED049550

Report of the First National Conference on PPBES in Education

RESEARCH
CORPORATION

June 10, 1969

The work presented herein was performed pursuant to a Grant from the U.S. Office of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the policies or policy of the U.S. Office of Education and no official endorsement by the U.S. Office of Education should be inferred.

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY Research Corp. of Assoc. of School Business Officials TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

COPYRIGHT 1969 BY THE

RESEARCH CORPORATION

of the

ASSOCIATION OF SCHOOL BUSINESS OFFICIALS

An Educational Research Organization
Incorporated Not For Profit

Library of Congress Catalog Card Number: 74-100054

Published by the

Research Corporation

of the

Association of School Business Officials

Address: Office of the Director of Research
2424 West Lawrence Avenue
Chicago, Illinois 60625

Printed in U.S.A.

Edited by:

Charles W. Foster, Ed.D., R.S.B.A.
Director of Research and Editor

Preface

The Research Corporation of the Association of School Business Officials, as part of its assignment "to develop a program planning-budgeting-evaluation systems design for local schools," must disseminate information about the Project periodically. The first National Conference on PPBES in Education is an example of the Corporation's partial fulfillment of its responsibility.

Recently, the Project Director prepared an article in the form of a progress report for The School Administrator. Because this article contains certain basic information about the first National Conference and its relationship to the Project, it seems most appropriate to include it as part of this report. Furthermore, the nature of the article makes feasible its usage as the major part of this preface in lieu of other separate introductory statements.

The reprint from the Summer, 1969 issue of The School Administrator appears on the following page.

PPBES Progress Reported

Editor's Note: This report was prepared for The School Administrator *by William H. Curtis, research project director, Research Corporation of the Association of School Business Officials.*

In 1968 the Research Corporation of the Association of School Business Officials (RC ASBO) entered into a three-year agreement with the U.S. Office of Education for the purpose of developing a design for an integrated system of program planning-budgeting-evaluation for local school systems. The goal of this project (PPBES) is to improve management of educational and financial resources by determining the quality and cost of the products of education.

The project will have three major outcomes—development and dissemination of a conceptual model of program planning-budgeting-evaluation design for use at the systemwide level of local school administration; demonstration of an operational system in the Dade County, Florida, public school system (a partner in this research project); and encouragement of other local school systems across the nation to investigate and use the model developed.

Last fall a decision was made to seek pilot districts in addition to the Dade County School System. The most important factors behind this decision were the need for additional support and review in the research and developmental process; the need to secure diversified opinions based on the knowledge and experience of school districts of various types and sizes; the likelihood that the volume of research required was beyond the capacities of any one school system; and recognition that pilot districts of various types and sizes located in different parts of the country would be of immeasurable value in the feedback and dissemination process.

School districts in Clark County (Las Vegas), Nevada; Douglas County, Colorado; Herricks, New Hyde Park, Long Island, New York; Memphis, Tennessee; Milwaukee, Wisconsin; Montgomery County, Maryland; Peoria, Illinois; and Westport, Connecticut, were selected to serve as pilots.

The initial outline of the conceptual model of an educational resource management design (PPBES in Education) was unveiled at a national conference held in Denver, Colorado, on June 10. Approximately 180 persons attended. The greatest number of those present were either chief state school officers or their assistants, the presidents or presidents-elect of the state associations of school administrators, and the presidents or presidents-elect of the state and regional associations of school business officials. Other participants included the RC ASBO Board of Directors and Program Budgeting Research Committee, the committee of consultants, representatives from the Education Commission of the States, the U.S. Office of Education, Dade County Public School System, and the pilot school districts, and executive secretaries of ASBO, AASA, CCSSO, NASSP, and NSBA.

Curtis

Ernest C. Grayson, president of the Research Corporation and the Association of School Business Officials, served as presiding officer of the conference.

David Novick, head of the cost analysis department of the RAND Corporation and a member of the project's "panel of experts," gave the keynote address, entitled "Program Budgeting: Its Origin, Present Status, and Future."

A joint presentation by the writer and John Gott, research associate, followed. The writer covered such items as an overview of the project and our responsibilities in the developmental and dissemination process; the importance of support by the members of the audience in encouraging greater involvement at the state and regional levels; a review of some of the major problems, and, finally, some observations and conclusions which set the stage for unveiling schematic diagrams which delineated progressively the development of the conceptual model.

John Gott, through effective use of dual screens and dual projectors, featured the proposed Educational Resource Management Design. He began with the rationale for PPBES in Education, followed by illustrations of the relationship between the educational process and society, from the standpoint of inputs and outputs. Mr. Gott showed several slides which illustrated a series of basic procedures to be covered in the detailed development of the design. Also included was an outline of the contents of the written material which will be part of the conceptual model.

Panel discussions, followed by summaries, questions, and recommendations from the participants, proved helpful to all.

The recorded proceedings of this national conference will be reviewed and edited for distribution in August. The report will include the details of the ERMD Model as presented (with a few slight revisions) as well as feedback obtained from the conference.

This report will also be included in the material to be used at eight regional conferences and two professors conferences to be held this fall. These conferences will give further visibility to the project and will help lead to greater involvement of state department officials, school administrators, school business officials, school board members, and teachers, in the dissemination, feedback, and developmental process.

It is expected that the outcome of these conferences will form very important guidelines for revisions and additions to the conceptual model during its developmental stages.

Reprinted from the Summer, 1969 issue of The School Administrator, with the permission of the American Association of School Administrators.

TABLE OF CONTENTS

I. KEYNOTE ADDRESS. 1

"Program Budgeting, its Origin, Present Status and Future."

Dr. David Novick, Head
Cost Analysis Department
RAND Corporation

II. RC ASBO INPUT INTO THE PROJECT 28

A joint presentation by:

Dr. William H. Curtis
Research Project Director
Research Corporation of ASBO

Mr. John W. Gott
Research Associate for the Project

III. SUMMARY OF THE GROUP SESSIONS. 70

Excerpts from the Concluding Panel Session

IV. APPENDICES 91

Chapter Outline for the Final Documentation

List of Participants at the First National Conference on Program Planning-Budgeting-Evaluation in Education

Analysis of the Questionnaire Distributed at the National Conference

Keynote Address

"Program Budgeting, its Origin, Present Status, and Future"

David Novick, Head
Cost Analysis Department
RAND Corporation

Introduction by Ernest C. Grayson, President of the Research Corporation of the Association of School Business Officials:

Our ASBO Research Corporation is sponsoring this Project and especially this Conference this morning because we feel the need for feedback. You are the key people, as we see it, in educational administration and we need your best thinking as to what we need to do on our Project.

Since early 1968 we have worked to design an integrated system and our goal is to provide improved methods to determine the quality and the cost of education which will, I think, result in improved management of educational and financial resources. I am confident today that both the ASBO Research Project and each of you will benefit from this Conference. So I welcome you and I hope that this Conference will be meaningful to you.

In thinking about this Conference and trying to come up with someone who might make a contribution and set the stage for this Conference today, we made the selection of Dr. David Novick as our keynote speaker. The Committee felt he was the one man probably more than anyone else who would be best qualified to set the stage for this Conference. His leadership and his accomplishments in the field of program budgeting have resulted in recognition and respect at the national and international levels. His experience in this particular field covers a period of better than thirty years.

Time does not permit an extensive enumeration of his accomplishments. However, it does seem appropriate for me to call attention to just a few so that each of you will be aware of the qualifications of our keynote speaker.

He was the primary author of plans under which the United States mobilized its industrial economy in World War II and later demobilized for peacetime production. Throughout the years he has served the government at the local, state and national levels in several major consultative capacities in relation to program budgeting. In recent years he has provided counsel in this field to the governments of France, Japan and Canada.

Since 1950 Dr. Novick has directed the costing of the RAND Corporation analysis department, ranging from weapons systems to urban problems.

He is the author of several books and numerous articles on national security, economics, military cost analysis, government budgets and wartime production controls.

In February of this year the American and New York Stock Exchanges entered into an agreement with the RAND Corporation to devise a systems approach to the stock market transactional procedure. Dr. Novick has been named as the Director of this massive project. It is a special source of satisfaction to us today that Dr. Novick is also a member of the panel of experts for our PPBES Research Project.

The topic of Dr. Novick's presentation today is "Program Budgeting, its Origin, Present Status, and Future."

Ladies and gentlemen, I give you Dr. Novick.

Dr. David Novick:

Dr. David Novick

Thank you, Mr. Chairman.

Ladies and gentlemen, let me start with a few parish announcements. On that table I have placed a set of documents which may be of interest to you. If any of you picked up any of them, please return them because there is only one of a kind. If you see something there that is of interest to you, do not hesitate to write to me at the RAND Corporation and I will be very happy to see that you get a copy. If you want them all, I refer to them as the Five-Inch Shelf on Program Budgeting.

The documents start back in time, and this is probably the first volume identified to present-day program budgeting. This is the 1954 publication urging program budgeting for the Air Force and the Defense Department. Since that time there have been seven other volumes, the latest one of which is a paperback published by Holt and Rinehart and released on the first of January. It can be obtained for $3.50.

The procession that started with this little volume next found its companion in the Government Printing Office abridged version of program budgeting. This was followed by the hardback Harvard University Press first edition which was also issued in a soft-cover edition for the Civil Service Commission. Then came the second edition hardback and this is the second edition in paperback.

There is also a Spanish edition and a Japanese edition and there may be before too long a French edition. Something over 50,000 copies of these books on program budgeting are now in print.

I do not know whether it is cause or effect of the 50,000 copies, but at this time there are some twenty-five states that either are practicing program budgeting or thinking about it in a serious fashion. There are probably 75 cities, the most outstanding of which is New York City. There are something over 20 counties.

In addition, the Government of Belgium just three weeks ago, in a meeting of the full Government, which means both the party in power and the opposition, decided to install program budgeting in that country after an extraordinarily good beginning. They started three years ago. I have been consulting with them ever since. They ran a pilot in the Agriculture Department. This was followed by another one in the Ministry of Health and today they are introducing training courses and related activities for a full-fledged effort.

Probably the most thorough-going program will be the one to be introduced in Japan on the first of the year. In typical Japanese fashion they have been building up for some two years now. They have sent over forty people to this country for various training exercises. They have sent perhaps twenty top officials who have engaged in, let us call it a survey of the activity, and I imagine when they get going it will be like the Sony television set.

Governments of Canada, Israel, France, have all proceeded down this line. I am told that there is a program budget in Sweden, but I have yet to receive any of the documents. A number of the less developed countries are toying with the idea, although, frankly, in my opinion, this is not for them at this point in time.

These are my introductory remarks. With that, let's turn to a film which runs for twenty-eight minutes. (Text of the film follows.) After that I will spend another ten minutes in trying to wrap up the major issues. Following that, I will take any questions that you may wish to raise in the remaining time that is available.

Text of the Film Presented at the National Conference on PPBES:

ORIGIN AND HISTORY OF PROGRAM BUDGETING

David Novick*
The RAND Corporation, Santa Monica, California

For the next half-hour, I shall be talking about the origin and history of program budgeting as part of the Civil Service Commission's orientation and training courses for the

---

*Any views expressed in this paper are those of the author. They should not be interpreted as reflecting the views of the RAND Corporation or the official opinion or policy of any of its governmental or private research sponsors. This is a transcription of a talk filmed on August 11, 1966 for the courses sponsored by the U.S. Bureau of the Budget and the U.S. Civil Service Commission for orientation and training in the Planning-Programming-Budgeting System.

Planning-Programming-Budgeting System (PPBES) which was introduced by the federal government in August, 1965. The occasion for this can be viewed from two angles: First, the intellectual or scholastic one that claims people do a task better when given an understanding of the background and roots of the process in which they are engaged. The other, and probably the more appropriate one, is to try to deal with comments that have been made from time to time about the Planning-Programming-Budgeting System either as something brand new or something that is specifically designed for application to the military or Defense Department activities.

As I hope to indicate over the next half-hour, the program budget has a rather ancient and hoary origin and it did not start in the Department of Defense. There are two roots of this concept and method: one in the federal government itself where program budgeting was introduced as part of the wartime control system by the War Production Board in 1942; the other root--an even longer and older one--is in industry. To be honest with you, I don't really know precisely when or how the program budget was introduced in business.

In 1959, after I had been writing about PPBS for more than five years, I had a visitor who said he had only recently become familiar with my proposals, and on reading the material he thought I'd be interested in his experience along the same lines. He gave me a set of written documents--General Motor's Budget and Finance Procedures for the Year 1924.

The visitor was Donaldson Brown, who had retired as Chief Financial Officer of General Motors and who was until his death a member of the Board of Directors of DuPont. According to Mr. Brown, by the time that DuPont made its investment in General Motors, DuPont was already using something very much like a program budget system. And this way of planning and budgeting was one of the major innovations in General Motors after the takeover.

Let me start by talking about the part of the origin that identifies to the federal government because this is the one in which I was closely involved and with which I therefore have a greater familiarity.

In the early summer of 1940, President Roosevelt created the National Defense Advisory Commission which was to assist our friends or "allies-to-be" in facilitating their war efforts. To do this, we undertook a variety of new or expanded production efforts and a number of new construction projects. In all of this, the building of ships and shipyards and the construction of new factories, one item of demand was common--overhead cranes.

As a result, by late 1940 the first of what was to become our World War II controls was introduced--a limitation order controlling the schedule of distribution and use of overhead cranes. This was followed over the next year and a half by a series of orders that copied the pattern of control of industrial production and distribution that had been used in World War I.

There was a limitation order dealing with aluminum as the aircraft demands made this metal in short supply. There were orders dealing with various alloying materials, as hard steel demands for military equipment increased. There were orders stopping the production of pleasure automobiles to cut back the use of materials like chromium and components such as ball bearings, and so on. The result was that even before the war had started, by the summer of 1941 we had a real traffic jam in our control system.

The military were using authority that had been given them to place priorities for deliveries of finished products such as tanks, aircraft, ships, and the like. The civilian supply agency also was authorized to place priorities on steel, copper, aluminum, and other materials for milk pails, medical and hospital supplies, and other essentials.

There were a great many priorities and these priorities soon started to outstrip the available supply. As a consequence, it became apparent that this way of doing business--separate controls for each situation--was not likely to work. In the early fall of 1941, a scheme which I developed--the Production Requirements Plan--attempted to deal with the priority and allocation problem on an across-the-board basis. Shortly after Pearl Harbor, this was made a mandatory nationwide system.

However, the Production Requirements Plan had been designed as a stopgap measure. That is, recognizing that the military did not know what was required to build their ships and planes and tanks, and did not have a schedule that could identify delivery in appropriate time periods, and did not have a way of effectively controlling the dollar volume of contracts placed, there was one essential need--to identify these fundamentals.

The Production Requirements Plan was designed to identify the material and component requirements for contracts that were being placed by the military, and probably more importantly, to measure the inventories and capacities of America's producing industry. It was an interim step on the road to a program budget in that it provided the first overall picture of the United States' needs and resources for war.

From this we learned that we could not look at one thing at a time, be it airplanes, ships, or stainless steel milk pails on the demand side; or steel, aluminum, overhead cranes, and ball bearings on the supply side. As a consequence, by early 1942, the War Production Board was looking at the total of military requirements and the total of war-essential civilian requirements in terms of a series of identifiable groupings; and, perhaps more significantly, these groups were being studied by the analytical tools then available.

The essential features of the situation can be made rather simple. Although we needed all the airplanes that we could get, all of the airplanes were not that important. At some point, roller bearings for the 2000th B-17 were less important than the roller bearings for a refrigerator in a municipal hospital. At some point, the 1000th tank of a certain type was less important than the stainless steel milk pails essential for milk to be supplied to either soldiers or civilians. As a consequence, the War Production Board learned the need for weighing and evaluating, and this led to the introduction in late 1942 of the Controlled Materials Plan.

The Controlled Materials Plan is to my mind the first program budget used in the federal government. It usually is not so identified because the budgeting was done in terms of copper, steel, aluminum, and other critical material rather than dollars, and for most people budget is associated with dollars. However, in choosing the media of exchange--copper, steel, and other critical items--we were recognizing that in 1942, dollars were less meaningful than physical resources. Currency could be created by fiat and without restraint, whereas materials of the type labelled as controlling were limited in quantity and their supply could only be increased by slow, and usually resource-demanding, expansion.

As a consequence, for the balance of World War II--that is, from 1943 through 1945--we effectively controlled the system of production in the United States and the distribution of output from that system through the Controlled Materials Plan, which was the first federal program budget. I call it a program budget because it had the following characteristics:

I. Identification of major goals

  - United States or allied combat needs
  - Essential civilian requirements
  - Other essential military or civilian demands
  - Aid to friendly nations
  - Economic warfare

II. Each major goal was identified in program objectives; for example:

  A. United States Military

    1. Combat theater equipment and supplies
    2. Combat support
    3. Zone of interior activities

III. Program objectives were further defined in program elements, for

    1. Combat theater equipment and supplies

      a. aircraft

        (1) (further defined by type and model)

      b. tanks

        (1) (broken down into size and purpose categories)

      c. automobiles

        (1) (identified as trucks, jeeps, personnal vehicles, etc., and trucks further refined into size and use categories)

IV. Programs crossed services lines so as to identify land, sea, and air forces as well as essential non-military contributions to identified objectives.

V. There was an extended time horizon. A budget was prepared every three months or quarter and it was projected for 16 periods, that is, the next quarter and the 15 succeeding ones.

VI. Alternatives were examined and systematic alalysis was made of both supply and requirements. Sometimes this meant resources were augumented by stopping production; the outstanding example: gold mining. This provided additional labor and equipment for other mining activities. In other cases, essential needs were met by "freezing" inventories and controlling distribution as was done in the case of passenger automobiles. In every case, the action was the result of analysis.

Our systematic analysis was not necessarily systems analysis in the breadth and depth we now identify to such studies; but under the Controlled Materials Plan we did cost-effectiveness analysis even if it did not have the sophistication which we expect today. However, in terms of the state-of-the-art of the time, I think the analytical and related methodology used in our World War II Controlled Materials Plan can be properly identified as a program budget.

The next steps in the federal development of a program budget took place in the Bureau of Reclamation, the Coast Guard, and some few other government agencies, and at RAND. I shall detail the RAND activities.

Early in its history, RAND decided that the traditional standards for choosing among preferred means of warfare of the future--for example, for aircraft, higher, faster, more payload--were not the only ones and so expanded the criteria into what is now known as weapons systems analysis. The first of these studies was completed in 1949 and in it a number of new factors were introduced--e.g., social, political, and economic--so that the study aims went beyond what the specific piece of equipment would do, and added considerations such as demands on the U.S. economy, and impact on the economy of the enemy. With the wide range of considerations in systems analysis, it was determined that there was only one way to bring this heterogeneous group together, and that was with the common denominator of the dollar.

At that time, RAND looked to the Air Staff for its data, and the dollar data were made available in the traditional form; that is, budget and financial information in terms of equipment, construction, personnel, and the like. Although there had already been some efforts in the Air Staff to develop a means for looking at weapon systems, these had not proceeded very far and as a consequence the traditional budget and financial data were something less than satisfactory for weapons systems analysis as developed at RAND.

If one wanted to do a systems analysis in which there would be a comparison between various types of bombers--for example, the proposed B-47 and B-52 and the existing B-36, B-29, and B-50--the data just were not available. When

RAND decided that it would have to engage in a more detailed analysis of the economic requirements of the proposed weapons systems, it became necessary to examine in considerable detail the available sources of information.

After several years, it became apparent that these would not provide the answers if they were maintained in the existing and traditional form. As a consequence, in 1953 there was a RAND publication proposing the first program budget to be applied to the Air Force. It also suggested that the methodology could be extended to the total of military activities.

The Air Force accepted this document with something less than complete enthusiasm, and as a consequence the idea was kicked around for many years. Let me say as an aside that although the Air Force did not endorse the idea, it also did not prohibit, or in any way interfere with, RAND continuing to expose the concept. The consequence was continued study and publication at RAND of ideas which we now associate with the program budget. This led to a culmination in 1960 in two documents--one, The Economics of Defense in the Nuclear Age; the other, New Tools for Planners and Programmers--which were brought to the attention of persons in the incoming Kennedy Administration who generally agreed that this might be one way of facilitating the treatment, analysis, and study of one large segment of the United States budget, namely, the military components.

And, as you know, in 1961 the initial effort was launched in the Defense Department and it has continued since that time. Program budgeting in the Department of Defense has been the subject of various types of criticism. Maybe I'm prejudiced, but to me most of it sounds very complimentary.

Turning again to the historical stream, as indicated at the outset, I really don't know when the DuPont Company came up with the idea of a program budget. However, as indicated earlier, they introduced their concept into General Motors in the very early 1920s. The important thing, I think, from our point of view, is that whether we're thinking of the application in industry or in government, we all have one common objective in the Planning-Programming-Budgeting process. That is not just to identify resources for administrative purposes per se in terms like real estate, equipment, personnel, supplies, and so on.

The PPBS method is to set forth certain major objectives, to define programs essential to these goals, to identify resources to the specific types of objectives and to systematically analyze the alternatives available. I think this may be made more simple by illustrating it in automobile industry terms. For example, at General Motors it means not only dividing up between Chevrolet and Cadillac divisions and the other major lines that General Motors produces. It also means within the Chevrolet line, identification of objectives in terms of price classes, categories of cars that they are trying to sell, and setting up specific programs for each of them. Then they calculate the resources required and the potential profits and losses under various conditions.

Now the word "potential" immediately introduces one of the major factors in the program budgeting system. That is, that we are dealing with uncertainty. In the typical budget proposal, we usually look at a relatively short period of time--that is, one year--and in handling that, we assume that we have complete confidence and knowledge about what will transpire.

As all of you know, the truth of the matter is that even within as short a span of time as a year, things happen and events do not work out exactly as planned. As a consequence, even then there is an element of uncertainty. One of the major features of the system that was introduced in Detroit was the fact that they were not planning just for next year's automobile, and had to deal with uncertainty in terms of four, five, or more years in the future.

In the current time period, next year's model or the automobile for year I is a fixed thing with only a little possibility of change. The article for the year after that or Year II, is almost a fixed thing because commitments must be made to long lead-time items as much as 18 months in advance. Even the automobile for year III is fairly well developed at this point in time and they are also planning for automobiles for years IV and V.

In other words, Detroit continuously has five model years in planning, as well as one model in production. And, they look at all of these in terms of all of the possible alternatives with respect to market conditions, the kinds of competition that they will be facing, the changes in income for their customers that can be projected, and the like. And this leads to a broad range of studies or systematic analyses. In addition and on top of this, they are at the same time treating of the capital investment program, because by and large they cannot make capital investments for an automobile more close at hand than year VI. In fact, if a change requiring investment in new plant is to be made for an earlier period of time, they must take into account the tremendous upset and additional costs that will be involved.

I hope that this rather generalized illustration of the way in which automotive planning, programming, and budgeting is done, gives you a better feel for just what is done in the system developed and used in Detroit.

Let me digress a moment, because although I didn't identify it, the concept of systems analysis, which again is closely identified with program budgeting, did not really originate in program budgeting _per se_. Systems analysis always has been a part of the work of competent engineers and engineering firms. Probably the greatest innovations in systems analysis were initiated in the 1920s in the Bell Laboratories. Actually, in many respects the Bell Lab's method of analysis then and today bears a close resemblance to what we called "weapons systems analysis" in the Defense Department or in other organizations such as RAND.

There is one major distinction and I think it is worth noting. That is, that the engineers (and this includes the Bell Laboratories) oriented their thinking largely, and sometimes exclusively, to the hardware or the equipment considerations.

Although they sometimes introduced economic, social, and political aspects, they treated these in a very primitive way. And I think the great significance of the change that we call weapons systems analysis today is the broadening of both the nature and content of the analysis.

In all of this, quantitative aids are of great importance, and we want to quantify as much as we can. But as has been stated repeatedly by Mr. McNamara; by Mr. Hitch, when he was Assistant Secretary of Defense (Comptroller); by Mr. Enthoven, the first Assistant Secretary of Defense (Systems Analysis); computers and quantitative methods are not dicisionmakers. They are, instead, aids to the decision-making process. They are aids in illuminating the issues. Today, I think most of us realize that we are not talking about computers as the decisionmakers in the PPB process. In fact, I think we realize it is "Anything But."

In fact, it is recognized that as important as, and in many cases more important than quantitative considerations, are problems of a qualitative nature for which we do not have numbers. This does not mean that analysis is not possible just because we cannot quantify. On the contrary, there are many ways of analyzing qualitative problems and it is an essential ingredient of this process that we undertake to do a substantial amount of qualitative analysis in addition to the quantitative work.

As you all know, and the reason that we are here is that in August of 1965, President Johnson said that this system which has been so successful in the Defense Department was now to be applied to all the executive Offices and Agencies of the United States Government. Even though there is a long history of program budgeting, even though it originates outside of the federal establishment, even though there are some 25 years or more of history that we can identify to the activity within the federal establishment, the truth of the matter is that the problem that we are now facing--that is, the application of the PPB concept to new areas of interest--is a new and very difficult one. And, one of the major problems is that of identifying the missions, the objectives, or the goals, not only of the federal establishment as such, but of each of the offices and agencies which make up the total of the executive department.

I think our Planning-Programming-Budgeting System offers all the advantages that President Johnson set forth in his 1965 announcement. It will be up to you and the others who are working on the problem in the federal establishment to give us as a nation the benefit of this new way of doing business.

End of Filmed Presentation

Dr. Novick's Presentation Continued

As a result of the introduction of program budgeting in the Federal Government, there have been two sets of Senate hearings which are now entering their third year, and Congress has been very interested and active in program budgeting in the last year or two. You may want to be familiar with this and may even want to write and ask for the Committee reprints. One of these is Senator Proxmire's Subcommittee of the Joint Economic Committee. The other is Senator Jackson's Committee, a Subcommittee of the Committee on Government Organization. Both of these have held very extensive hearings. They have also called on experts for presentation of prepared papers, and these too are available in Committee reprint forms.

In addition, there is now developing a moderate amount of literature. When I say moderate, I mean just that. As most of you who have tried to find out what program budgeting is have discovered, there really isn't very much written on the subject, and what has been written is, by and large, illustrative. The only case in which there is any experience in hard facts is in the application to the Air Force. I say Air Force because even in the case of the Army and the Navy the basic work essential to an understanding of how these organizations operate remains to be done.

As a result, for the Navy we have really two programs -- in the strategic forces, the Polaris submarines, and everything else which is called general purpose forces. In the case of the Army we have the same situation. We have Nike, Sprint or Spartan, whichever name you want to call the missle, which is again in the strategic forces, and then we have everything else called general purpose forces.

Now obviously, no resource-consuming activities as large as the remainder of the Navy, or the remainder of the Air Force, represents one particular program, yet we have not been able to do the work necessary to break these large areas down into a better basis for analysis.

I refer to this because it is not only in the non-military field that we have not made too much progress. I don't think we should mislead ourselves. Program budgeting represents an opportunity for people to better understand what they are doing. It presents a new way of doing business, which I think provides a very real opportunity, because we are talking about outputs, end products, objectives, rather than concentrating on the traditional input side of men, real estate, materiel, supplies and the like.

Now let me just briefly mention a few things that program budgeting is not. First, it is not performance budgeting. There is nothing wrong with performance budgeting, but it does not provide a choice between alternative objectives. Instead, it concentrates on efficiency. In other words, alternative means of performing a stated task. It does not give you priorities as between objectives A, B, C, D.

Similarly, program budgeting is not cost accounting, although a great many people have fallen into this trap, and don't be surprised if you have. The Government of Canada spent two years with some very expensive consultants, developing what they thought was a program budget, only to discover that they had a new cost accounting system.

Now, again, there is nothing wrong with cost accounting, we need it, it is an integral part of the data collection process. It is a part of the control System. But it is not program budgeting.

In the literature that has been developing over the last few years there are several writers whose names I think you ought to know. Curiously enough, they tend to be political scientists rather than economists. One is Allen Shick, now with the Brookings Institute, another is Bertram Gross, formerly of the Maxwell School of Public Administration at Syracuse, now of the School of Urban Planning at Wayne State University in Detroit. Another is Wildavsky at the University of California at Berkley.

Turning back to program budgeting, we do not have a black box that we can give you that you can plug in and say "Ipso facto, I have a program budget." A program budget is a way of looking at things and you must adapt it to your own particular situation. I have been impressed with the work that has been done by this group in the application of this concept to the field of education. I think you can all feel well pleased with the product of your effort to date. But let me conclude this part of my discussion with a quotation from Allen Shick, which I think probably provides the best distinction between the various contexts of program budgeting and its competitors:

"Performance budgeting is management-oriented. Its principal thrust is to help administrators to assess the work efficiency of operating units, first by casting budget categories in functional terms, and second, providing work cost measurements to facilitate the efficiency performance of prescribed activities. Generally its method is particularistic, the reduction of work cost data into discrete measurable units.

"Program budgeting is planning-oriented. Its main goal is to rationalize policy-making by providing data on the costs and benefits of alternative ways of attaining proposed public objectives and output measurements to facilitate the effective attainment of chosen objectives. As a policy device program budgeting departs from simple engineering models of efficiency in which the objective is fixed and the quantity of inputs and outputs is adjusted to an optimal relationship. In program budgeting the objective itself is variable. Analysis may lead to a new statement of objectives.

"In order to enable budget makers to evaluate the costs and benefits of alternative expenditure options, program budgeting focuses on expenditure aggregates. The details come into play only as they contribute to an analysis of the total system or of marginal trade-offs among competing proposals. Thus in this macro-analytical approach the accent is on comprehensiveness and on grouping data into categories to allow comparisons among alternative expenditure mixes.

"Performance budgeting derived its ethos and many of its techniques from cost accounting and scientific management of the 1920s. Program budgeting has drawn its core ideas from economics and systems analysis as developed in the 1940s and '50s.

"In the performance budgeting literature, budgeting is described as a tool of management and budget as a work program. In program budgeting it is an allocative process among competing claims and the budget is a statement of policy. Chronologically there was a span of several years between the bloom of performance budgeting and the first articulated concepts of program budgeting. In the aftermath, in the first Hoover Report, and especially during the early fifties, there was a plethora of writings on the administrative advantages of performance budgets."

At this point I would like to correct Dr. Shick who is a relatively young man. There was probably more writing on the performance budget in the late twenties and early thirties than there was in the fifties.

"Substantial interest in program budgeting did not emerge until the mid-1950s when an economist, Novick, urged reform of the federal budget system, but what the economist had in mind was not the same thing as the Hoover Commission. In line with its management perspective, the Commission (this is the Hoover Commission) averred that the all-important thing in budgeting is the work or service to be accomplished and what that work or service will cost is essentially performance budgeting.

Mosher followed this view closely in writing that the central idea of the performance budget is that the budget process be focused upon programs and functions, that is, accomplishments to be achieved, work to be done."

It is from that type of statement and the use of the word "program" in it that much of this confusion between program budgeting and performance budgeting derives.

"But from the planning perspective the all-important thing surely is not the work or service to be accomplished, but rather the objectives or purposes to be fulfilled by the investment of public funds. Whereas in performance budgeting work and activities are treated virtually as ends in themselves, in program budgeting work and services are regarded as intermediate aspects, the process of converting resources into outputs.

"Thus in a 1954 Rand paper Novick defined a program as 'the sum of the steps or interdependent activities which enter into the attainment of a specified objective.' The program, therefore, is the end objective and is developed or budgeted in terms of all of the elements necessary to its execution.

"Novick goes on to add 'This is not the sense in which the government budget now uses the term.' Of course, that was written in 1954."

Now, this is, I repeat, a quotation from Shick that I have just read and I think his writing and that of some of the other people that now emerges is very useful from the theoretical point of view, the conceptual point of view. Unfortunately, what is still lacking, and this is true of my own writings because we just don't have that much experience with the application side. So let me repeat, the program budget is not a handy-dandy, you cannot go out and buy a black box and plug it into someplace in your system. You must, instead, take these concepts and develop them as tools in your own particular situation.

Let me just sum up with a few words what I think are pretty good catch phrases for program budgeting.

The first one: Remember that the name of the game is Alternatives. This is what distinguishes it from most prior efforts. In other words, you are trying to examine as many alternatives as you have time, resources and imagination to explore.

The next is, you are dealing with an extended time horizon. You recognize that what it costs this year may be only the beginning and a small step towards a much, much larger cost at some future time.

A most obvious case for you would be school construction when inadequate or no provision is made for teachers and related additional expenditures that are going to be involved.

We are also dealing with analysis but not always quantitative analysis. We use numbers wherever they are available and wherever they are applicable, but if we do not have numbers we carry out an exercise in logic. And, above all, remember that the program budget is not a decision-making device. It is rather a way of illuminating the problems confronting the decision-maker in terms of the alternative avenues of action that he should explore and bear in mind.

Probably the last thing but maybe the most important thing is that if you do a good program budget, you do not sweep things under the rug. You recognize that you are uncertain about a great many things but you face up to this explicitly. You identify the uncertainties, you identify what might happen, and you put this on the table, too, you don't walk away from it.

RC ASBO Input into the Project

A joint presentation by:

Dr. William H. Curtis
Research Project Director
Research Corporation of ASBO

Mr. John W. Gott
Research Associate for the Project

Introduction by Ernest C. Grayson, President:

The next part of our program deals with the Research Corporation of ASBO's input into the Project for PPBES. It will feature a dual presentation by Dr. William H. Curtis, our Research Project Director, and John Gott, who is our Research Associate for the Project. Since these two will be operating as a pair up here today for this part of the program, I am going to make the introduction of both at this time and then turn the program over to them. Bill will be the leadoff man.

Last year when our Research Corporation was interviewing candidates and seeking someone to head up our Project on PPBES, we were looking for a person whom we thought would be able to bring to this Project a wide background of experience. We were very fortunate to have at that time available to us Dr. Bill Curtis who was preparing to retire as an active superintendent in Connecticut. With him he brought a wide background of experience, being a teacher, a principal, a superintendent, past President of the Connecticut Association of Public School Superintendents, New England Association of School Superintendents and the American Association of School Administrators. So Bill, approaching retirement, agreed to come with our Project and direct it.

I think on several occasions he has asked us, "So this is retirement? I should go back to the superintendency," because he has probably worked more with this Project than he has with the superintendency. We are pleased to have him with us. He has done a tremendous job for us in developing this Project.

We were also very fortunate in December to have John Gott become affiliated with this Research Project as a Research Associate on a part-time basis. John is combining his efforts on our behalf with work toward his doctorate at Washington State University.

He is particularly well qualified for his current assignments because of his sound educational background and his broad experience as a teacher, guidance counselor and business manager in school systems in Missouri and New Mexico from 1946 to 1961.

From 1961 to 1963 he served as Chief of Public School Finance for the State of New Mexico; from 1963 to 1965 as Director of the Department of Finance and Administration; and from 1965 to 1968 as Assistant Superintendent for Finance and Maintenance of the Albuquerque, New Mexico, Public Schools, a position from which he is now on a leave of absence while pursuing his doctoral studies.

Last February, the American Association of School Administrators recognized John's abilities by awarding him the McClure Scholarship for 1969.

According to Bill Curtis, John has rendered outstanding service in the development of the schematic diagram and related materials which illustrates the basic pathways our conceptual model is following. Therefore, it seems most appropriate that he should have the responsibility of presenting the proposed basic structure of the model here today.

As I said, our leadoff speaker will be Dr. Bill Curtis.

Dr. William H. Curtis:

Dr. William H. Curtis

President Grayson, ladies and gentlemen. At the outset I wish to thank each of you for taking time to make the trip to Denver to be with us at what we feel is a very important conference. We know that taking time away from your desk in June is especially difficult and we are doubly grateful for the effort which you have made. We are delighted to have the leadership here because as this project develops we are counting on you for further support.

In his introduction President Grayson indicated to you that I do have experience in the field of education, having been a practicing administrator for a good many years. However, with this comment I would like to emphasize to you that I do not stand before you as an expert in the field of Program Planning-Budgeting-Evaluating Systems design. As I see it, I am in this position because of the background of having been in general administration and because of the fortuitous circumstance of having been a president of AASA with the opportunity to meet many times with many of you.

As indicated by President Grayson, John Gott will have the major portion of this next hour for the presentation of the schematic diagrams and to illustrate the direction our model is moving. It is my responsibility to tell you something about the processes we have followed, the involvement of certain groups and the team effort.

I would like to share with you some of the problems that are being experienced in the field of PPBES across the country and then at the same time share with you some of my observations. Having had the privilege of speaking to some of you previously, some of the statements I will be making here this morning will represent a partial duplication. I apologize for this duplication but I recognize that many of you are being exposed to this field for the first time, and so I ask the rest of you to bear with me.

First of all, I wish to remind this audience of our charge. When I refer to our charge, I mean that of the Research Corporation of the Association of School Business Officials. Our initial charge is to build a conceptual model in Program Planning-(or Planning-Programming, whichever you choose) Budgeting-Evaluation Systems design for the school districts of the United States, and our second charge is to disseminate information concerning this model.

As part of the dissemination process, this first National Conference of the leadership, in itself, represents our first effort at broad dissemination of information of our initial efforts.

Let me underline the word "initial." Then remember with me, if you will, that we have until June 30, 1971, to complete the model in its final form.

I make this statement so you will understand that the information which is given to you today is very much in the formative stages. You, as leaders in education, are being given an early opportunity to react to it. More improtant, in our judgment, is the fact that you will have the opportunity, and I hope you feel, the privilege, or going back to your respective states and alerting your consitituency as to what is happening in this new approach to the decision-making process. Also that you will furnish the leadership to give effective guidance to the power structure of your states and local districts.

I would like to assure you that in the unveiling of the schematic diagrams during the next hour, we are not expecting any of you to attempt to absorb them in detail, but merely to observe the pathways which we are proposing for the model -- and when I say "we" I am referring to John Gott, to our consultants, to the representatives of pilot districts and any of our associates who have been in on the team effort. We have been involved in the developmental process for some time, and we recognize that the material to which we will be exposing you for the next hour is too much to understand in a single presentation. So as you look at it, don't attempt to find all of the answers; just try to absorb, if you will, some of the pathways and some of the ideas behind this initial phase of the conceptual model.

By way of setting the stage for the comments that John is going to make and the diagrams he will show to you, I will spend a few minutes telling of some of the problems which we have experienced in connection with the development of this design and some of the problems that other projects seem to have experienced; also some of the problems which have been called to our attention by the leadership such as yourselves, i.e., problems at the state level; problems at the local level. Some of these problems Dr. Novick has mentioned to you already.

I start with the pressures, i.e., the pressures to bring forth this model 'yesterday', not two years hence. Dr. Novick indicated to you that he knew of 25 States in which they either have a plan or are considering one. According to the latest information we have and from what we consider a reliable source, it goes beyond the 25 States. From the information we have it would seem that upwards of three-quarters of the States of this Nation, through their legislatures, are either considering some kind of a pattern of PPBES at the state level or have already mandated this process. Therefore, I am appealing to you who represent the educational leadership of this country, if you have not already done so, to get in on the act now and be a part of this new process and to give it your support and leadership.

As part of these pressures, also, we find that there is an effort to have us and the members of other projects release information prematurely. We have been reluctant to do so. We are all wary of reporting on something which might seem to be the final answer especially since we are a long way from completion.

There is another area which is presenting us with some problems, but we are overcoming this one rather rapidly, I am pleased to say. I refer to the lack of coordination between many of the projects. This is the fault of no one in particular but the growing interest in PPBES has brought about, as far as we can determine, eight to ten major projects in this particular field, with some 75 or a hundred minor projects in process. Those of us who have the responsibility of serving as Directors of the major projects are attempting to develop further coordination.

The third point which I would like to mention by way of a problem is the failure still, on the part of so many leaders in the field of education, to realize and accept what is taking place. The lack of realization may be due to apathy or being busy with so many other problems. In many cases the superintendents have not been in the vanguard of leadership nor has this been true necessarily at the state level. I have found some of the better examples of leadership in PPBES among the business officials.

Now, I say that by way of a challenge to you. I hope that again the general administrators and the administrators at the state level will move forward and make this a coordinated effort.

Another point: There seems to be a fear on the part of some educators that this new process will unveil too many weaknesses in their administrative patterns. I have to make the observation that perhaps this is true. If it is true, I suggest that you not be disturbed about it but again move into a position of leadership to do something about it.

Another problem: The plain, everyday resistance to change. In other words displaying the attitude that we have always done it according to the line-item function-object process; that such has been good enough for us for the last twenty years so why change?

As Dr. Novick indicated, we are not suggesting that PPBES is the panacea but it does represent a new process and one that is sweeping across the country like a prarie fire and we feel it is more important to be a part of it rather than to be left behind.

Another problem: Some of the difficulties being encountered structure-wise. In my travels and studies of the past few months I can tell you that much is being done in the name of program budgeting but little as yet in the true PPBES approach. I am willing to be corrected on this next point, but as yet I have not been able to locate a school system in the United States that has truly developed and implemented and has in operation, in total, such a process.

The areas of planning and programming and evaluation as part of the total PPBES operation seem to represent a major stumbling block. Inadequate planning, inadequate relating of planning to programs; the establishment of the detailed objectives as indicated; determination and analysis of the alternatives; and finally, at the other end of the scale, the evaluative process which is so important in this overall operation, all seem to have been neglected to varying degrees.

There is still a tendency, as program budgets are developed toward the PPBES approach, to continue to relate them too closely to the current function-object line-item approach. Now, this is not by way of criticism of the present operation. It has served well. But, ladies and gentlemen, you know that it has outlived its time. We are on the threshold of a new development, and eventually the old procedure, in my opinion and the opinion of a good many others, will become obsolete.

Semantics (definitions) still present a problem. In an effort to overcome this problem we and representatives of other projects are attempting to develop a glossary of terms which will have a reasonable degree of commonality.

Next, I would like to emphasize to all of you as educators that as these programs are being developed, there is always the problem of keeping in focus the student and what takes place in the classroom; in other words,the importance of keeping the instructional process first and foremost in the development of the model.

Finally, there is the almost unsolvable problem of satisfying each of the fifty States. The variance of the state laws, the variance in the state support programs, many different formulas which deal with state support, the varying degrees of fiscal independence and fiscal dependence all present major problems as I am sure you will recognize; and finally, the varying sizes and characteristics of the various school districts along with their wide range of educational needs and problems of all kinds.

Now, in order to keep John on schedule, I will read very hurriedly some observations I have listed and which should help to set the stage for John's presentation.

It is our opinion -- and when I say "our opinion," it is the opinion of our consultants, our panel of experts, our team on this job, including, of course, our partner, Dade County, and our backup through our pilot districts -- that this new approach should result in a more objective look at what we are trying to do in education, how well we have done it or are doing it, and finally, how to go about the process of creating change and improvement.

Secondly, this new approach to the decision-making process should help to build greater support and confidence in our school systems on the part of the public.

Next, obviously, it should result in better long-range planning, better involvement of staff, students, community, and therefore more effective use of resources. You heard Dr. Novick stress how important resources are in this process, not resources in terms of dollars, but resources in terms of other dimensions which you will see on the screen in just a moment or two.

The model or models, when completed and refined, must provide an overall pattern or patterns for school districts of varying size and characteristics and must give them "room in which to move" in the developmental process.

To you as educators, I would emphasize the importance of developing massive in-service education programs so that staff involvement will be much more effective, and you as administrators at all levels must give leadership to the matter of developing these massive in-service training programs.

Finally, if you will, please, remember it is rapidly becoming accepted that the sound approach to the budgetary process of the future will be based upon some sort of a design involving effective identification and use of resources, establishment of desired goals and objectives, careful program planning, development of alternate patterns for the decision-making process, more sophisticated methods of allocation and accounting, and finally, an evaluation program to determine accomplishments in terms of established goals and objectives. It is upon this note that I end my part of the presentation and turn this podium over to John Gott, who will now, through a series of slides and the use of dual projectors and dual screens, develop the schematic. We have indicated this project has been a team effort, but

I wish to make certain that all of you know that the lion's share of the credit for the hard "nitty-gritty" work in the developmental process goes to the man who is about to make the next presentation to you.

Mr. John W. Gott:

Ladies and gentlemen. To use Dr. Novick's terminology, what we are going to show you this morning is not the black box. We hope it is a picture of a black box in the building. We hope that it will give you some ideas of where we think we are going to go in this over the next year and a half.

Mr. John W. Gott

I call your attention to the title that we are giving our conceptual model to differentiate it so that you know it is distinctly the Research Corporation of ASBO's Model of Programming, Planning, Budgeting Evaluation in Education. We have spelled out this E.R.M.D. (See Figure 1.) The words are an "Educational Resource Management Design." We believe that the emphasis of this approach is distinctly upon the management of resources.

ERMD

RESEARCH
LAMP OF LEARNING
TORCH OF KNOWLEDGE
TRAINING
SCHOLARSHIP
ASSOCIATION of SCHOOL BUSINESS OFFICIALS
ASBO
PROFESSION OF EDUCATION
FIELD OF SCHOOL MANAGEMENT
CORPORATION
Founded 1913

Educational
Resource
Management
Design

Figure 1.

The first point that I wish to make regarding our examination of the problem of building an appropriate model for Planning, Programming, Budgeting and Evaluation in Education is that we have made certain assumptions regarding the reality in which this plan will operate. (See Figure 2.)

ERMD
Assumptions —

The financial resources available to the school system are less than equal the demands of the system.	Productivity of a school system can be enhanced by organization of activities and services into programs specifically directed toward achieving carefully defined goals.
The school system exists to produce a set of products — to achieve certain objectives expressed as specific changes in characteristics of learners.	Better decisions regarding program selection and operation result when the costs thereof are considered on a longterm (multi-year) basis.
Objectives of a school system can theoretically be achieved in a multitude of ways (programs), some of which are more effective and/or efficient.	Better decisions regarding program selection and operation result when production (output) is methodically related to objectives.

©RC

Figure 2.

Our assumptions regarding the Educational Resource Management Design, a form of PPBES, include these statements, and may I inquire, are these visible to all of you over the room? If they are not, I will read them. Anyone who cannot read them? Over here? All right.

We say, very briefly, something that I think is obvious to all of you, that the financial resources available to the school system are less than equal to the demands of the system.

We say, also, that we believe the school system exists to achieve certain objectives expressed as specific changes in characteristics of learners.

We say that the attaining of these objectives can theoretically be achieved in a multitude of ways which we call programs, some of which are more effective and/or efficient.

Then we say that the productivity of a school system can be enhanced by organization of activities and services into programs specifically directed toward achieving carefully defined goals.

We say that better decisions regarding program selection and operation will result when the costs thereof are considered on a long-term or a multi-year basis.

And, finally, we say that better decisions regarding program selection and operation result when production (or output) is methodically related to the objectives.

Now, I think it follows out of this that one of our concerns is the relationship between the school system and the society of which it is a part. So we call your attention to this relationship. The relationship of school and society is a peculiar one, and it has imposed upon us in our work certain constraints that we have felt to be important and which we now bring to your attention. (See Figure 3)

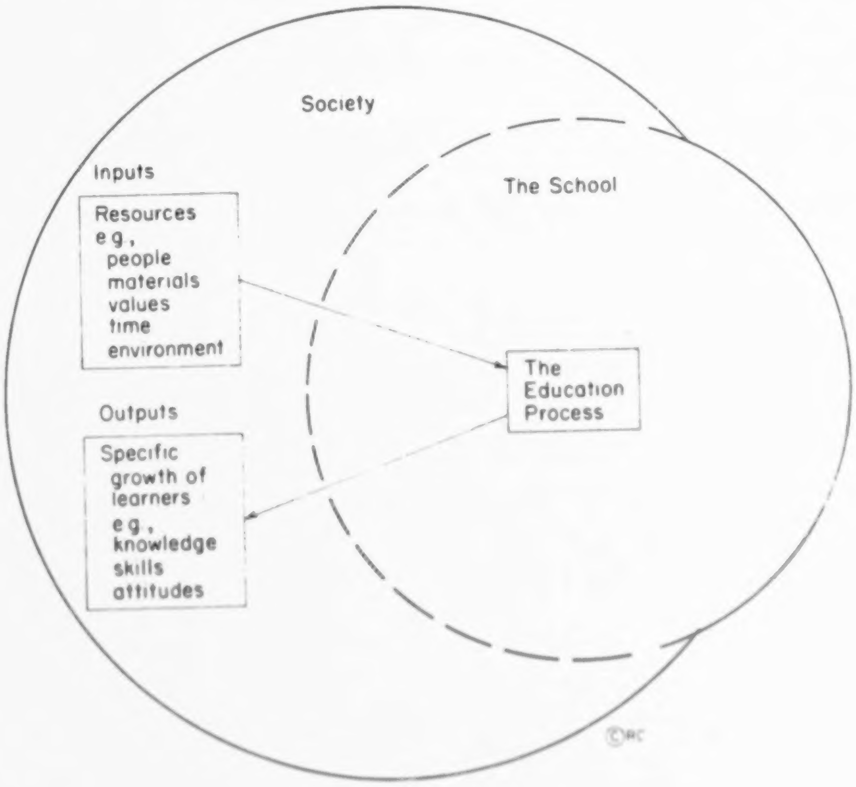

Society
The School
Inputs
Resources
e.g.,
people
materials
values
time
environment
The Education Process
Outputs
Specific growth of learners
e.g.,
knowledge
skills
attitudes
©RC

Figure 3.

In the first place, we show the school to be within society as an open system, theoretically responsive to the demands of that society.

Now, some of you may be concerned about the placement of the school within society. Please let me point out to you that we are not attempting and we do not consider it our responsibility to settle the philosophical question of whether the school is on the leading edge or the trailing edge of society in a time sense. So we have left it for you to put the future in whichever direction you desire. If the future is this way for you (indicating top), then in a time sense the school is in the center of society. If the future is in this direction (indicating left), then it is on the trailing edge. If the future is in this direction (indicating right), then it is on the leading edge. You place the future where you wish it to be philosophically. Our concern here is the fact that the school is within society and has a distinct relationship to society as far as its responsibilities are concerned. We will later provide an approach reflecting this in individual school system efforts to develop objectives.

Society provides the school system with certain inputs and these are rather broadly defined. We give you these as examples of them. (Indicating inputs, Figure 3.) We think it is necessary, in order to utilize E.R.M.D. appropriately, that we consider not only money but also many other factors such as people, materials, values, time, the total of the environment. These are, in a very real sense, resources of the school system available to it to use in the educational process within the school.

It is with this educational process that we will later be more concerned. But the educational process is intended to result in the production of outputs for society in the form of specific growth of learnings such as increase in knowledge, skills and attitudes. It is out of this process that we are going to direct your attention to the first description of the Educational Resource Management Design that we are developing. This, we think, is the direction in which we need to move. (See Figure 4.)

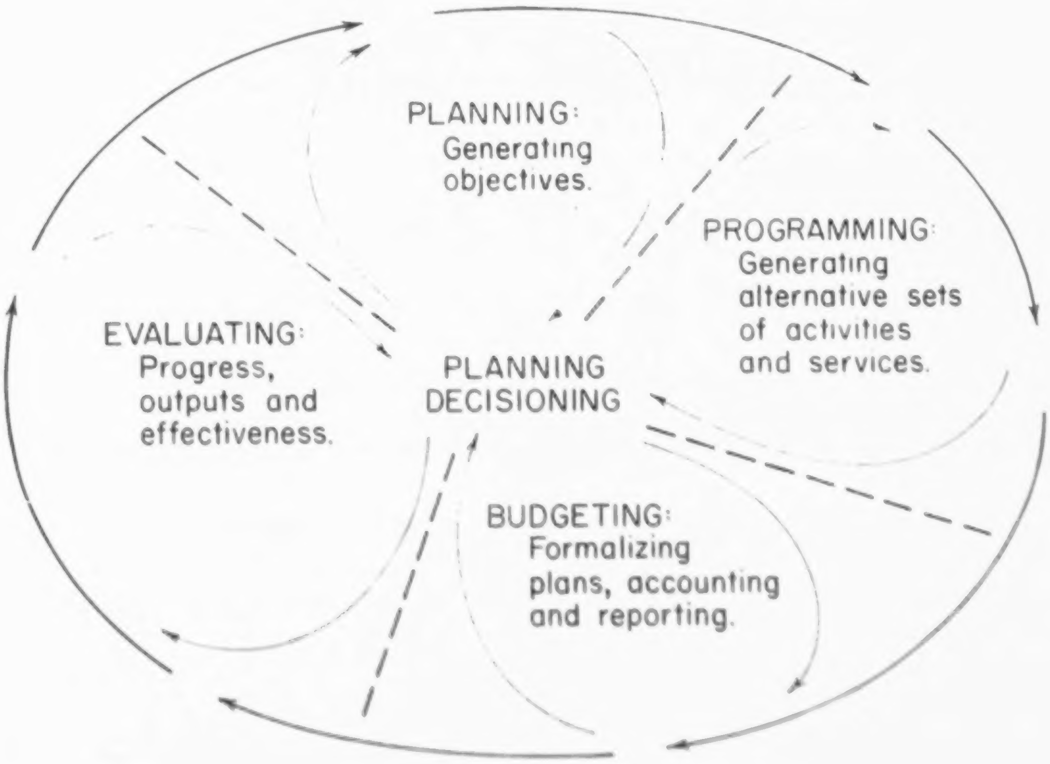

PLANNING:
Generating objectives.
PROGRAMMING:
Generating alternative sets of activities and services.
EVALUATING:
Progress, outputs and effectiveness.
PLANNING DECISIONING
BUDGETING:
Formalizing plans, accounting and reporting.

Figure 4.

We divide the parts of the Educational Resource Management Design or PPBES in Education into four distinct parts. I could, I think, confuse you by calling them phases or elements or something else. But we will just call them parts, and these parts are planning, programming, budgeting, evaluation, all surrounding planning and decisioning.

These parts have not had, in other applications of PPBES, the same kind of emphasis that we give them in the educational setting. We think our emphasis is appropriate because of the peculiar relationships that education has with society and the peculiar conditions that presently exist within the educational undertaking.

Now let me briefly give you our definition of planning. It is those acts devoted primarily toward qualifying the school system to meet its responsibility to society. In effect, it is decision-making concerned with guiding internal change to the end that the school as an institution adapts effectively to the dynamic society of which it is a part. Planning, then, is directed toward keeping the school doing what it is supposed to do, and we say specifically and briefly that it is generating objectives.

Now, programming, on the other hand, consists of those acts which are included in developing a configuration of interrelated services and activities, with each configuration representing a design for attaining a specific objective. It is the development of different programs.

Next, we say that budgeting is broader, perhaps, than we normally think of it. We say it is the sum of the acts involved in final reconciliation of programs and available resources according to established priorities, plus it is preparation of the budget document, plus it is approval by the Board of Education, plus it is execution of the budgetary plans insofar as this involves management of,accounting for and reporting use of resources.

Finally, we define evaluating as being those acts involved in developing subjective and objective data, descriptive first of progress in attaining stated objectives, and second, descriptive of the outputs which constitute final attainment wholly or in part of stated objectives.

Now, these various phases or parts or elements, whatever you wish to call them, are all important within our view of PPBES in education or Educational Resource Management Design. I know that there are people who would take evaluating and define it in such a way as to encompass all of these. Alternatively, there are those who would describe planning as encompassing all of these. We think each part worthy of separate and distinct treatment in our model.

We feel that in education at the present time we are now doing all of these parts -- perhaps in a rudimentary fashion, perhaps not as well as we have been taught; but we do have skill in planning; we have been taught how to generate objectives, how to develop good objectives. We have certainly been taught how to develop ways of teaching to achieve those objectives. I believe we are fairly skilled in accounting and reporting and budgeting areas, and I believe probably all of us in this room have had some course in educational measurement and evaluation. So we are not without some skill and expertise in each of these areas. But let us move along and consider the events that make up this set of parts to the Educational Resource Management Design. (See Figure 5.)

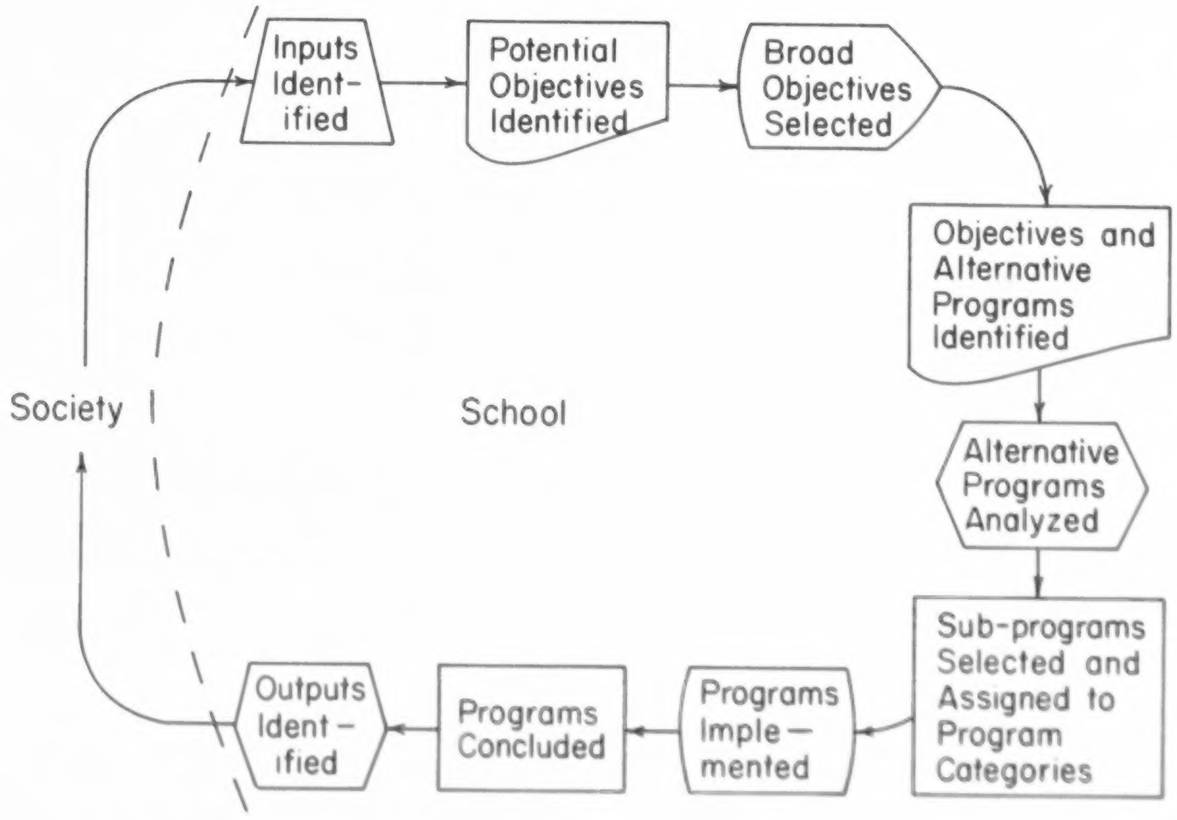

Inputs Ident- ified
Potential Objectives Identified
Broad Objectives Selected
Objectives and Alternative Programs Identified
Society
School
Alternative Programs Analyzed
Sub-programs Selected and Assigned to Program Categories
Outputs Ident - ified
Programs Concluded
Programs Imple - mented

Figure 5.

Very briefly, we consider that this part of our events (Indicating first three squares) corresponds to the planning, this group corresponds to the programming part, (Indicating next three squares), and this group through the conclusion of the program, corresponds to the sequence of events with which budgeting is concerned. Budgeting is overlapped by evaluating during program operation.

Notice please the first three events in the planning section. When the inputs have been identified, the potential objectives must also be identified. Then the broad objectives must be selected. After that there must be identification of alternative programs to accomplish those objectives. From among those alternative programs, the district must select the ones it will use. The selected programs must be divided into subprograms which are functionally related; these subprograms are then organized into program categories for efficiency and ease of administration; the programs are implemented; they are operated to conclusion; and what has been produced must be evaluated as to whether or not it is in accordance with the chosen objectives.

This is the general design. But now let's move this slide over on the left screen and close this one off so we can start looking at some of the activities that are behind each of these events. (See Figure 6.)

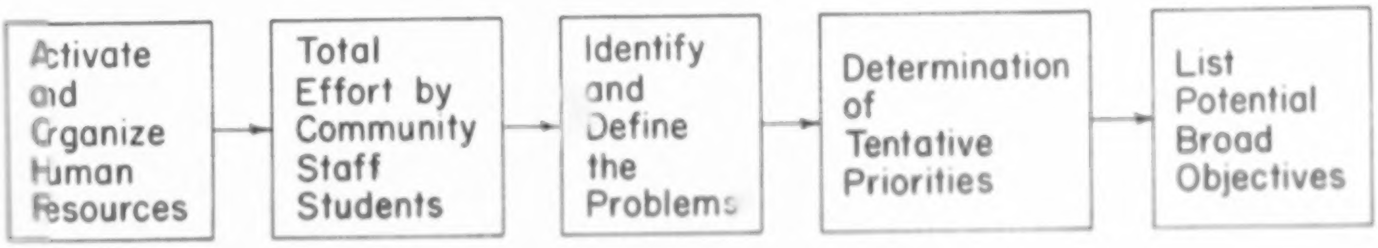

Activate and Organize Human Resources
Total Effort by Community Staff Students
Identify and Define the Problems
Determination of Tentative Priorities
List Potential Broad Objectives

Figure 6.

For example, in the planning area we say that it is ery important that we have community involvement. This is, n essence, what this says -- that it involves all of these esources we have previously discussed; that it is aimed at identifying the community or societal problems; and it is aimed at determining tentative priorities. There are those who might call this cost benefit analysis, but, in any event, it has to do with determining what it is that the school system is generally going to undertake with the resources it has at hand. It has to do with determining the highest priorities in a particular community, wherever the community may be.

Finally, we suggest listing potential broad objectives, which are in turn subjected to screening by very relevant considerations. (See Figure 7)

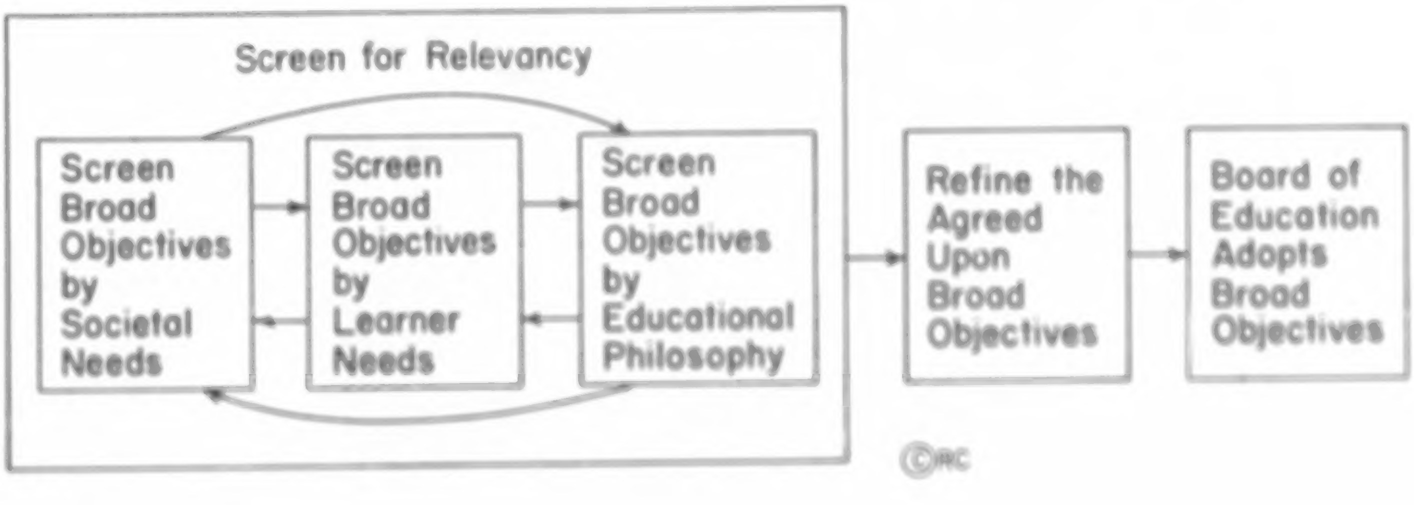

Screen for Relevancy
Screen Broad Objectives by Societal Needs
Screen Broad Objectives by Learner Needs
Screen Broad Objectives by Educational Philosophy
Refine the Agreed Upon Broad Objectives
Board of Education Adopts Broad Objectives
©RC

Figure 7.

Do these proposed objectives actually meet societal needs? Do they meet learners' need? Are they consistent with our educational philosophy? Out of the interaction of this kind of screening we believe there will come broad objectives which have been agreed upon and which must then be refined prior to adoption by the Board of Education. This generally brings us through the first three events on our events diagram. (See Figure 5.)

Let us look, though, at some examples of what we are talking about when we say objectives. (See Figure 8.)

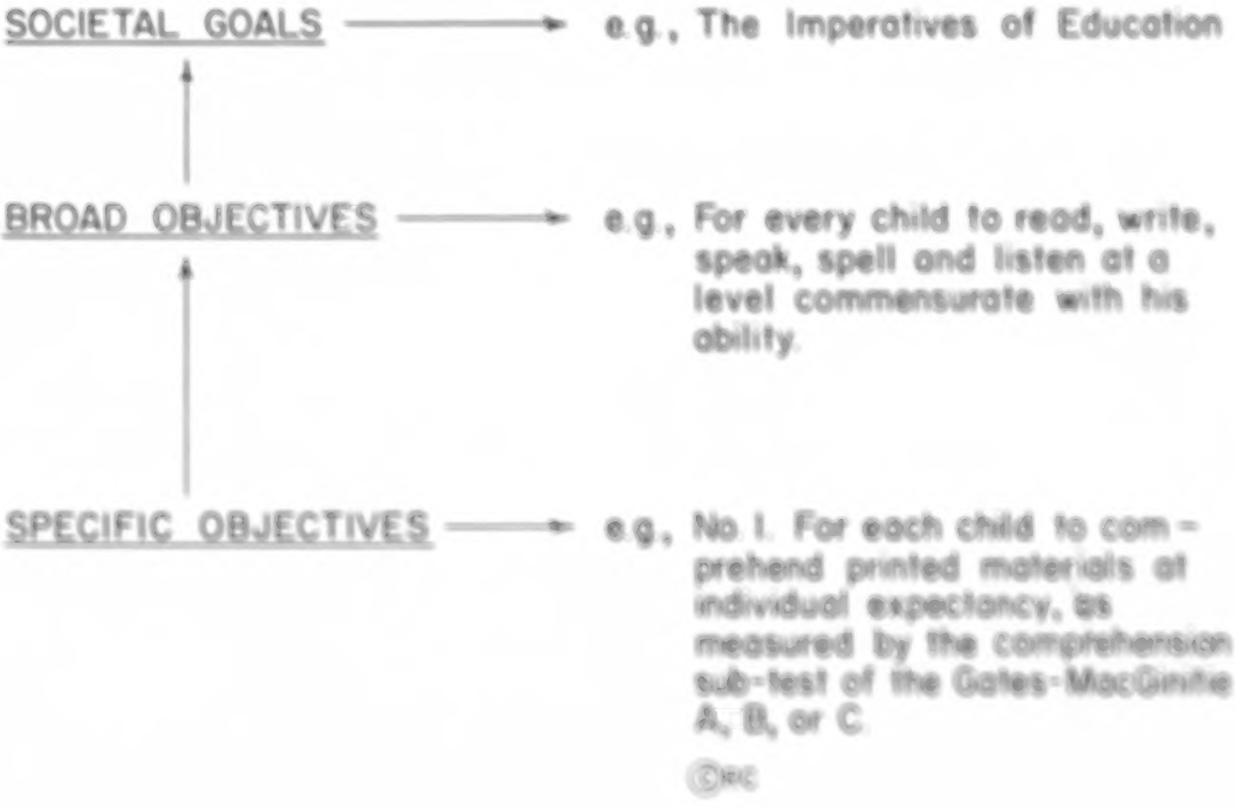

SOCIETAL GOALS
e.g., The Imperatives of Education
BROAD OBJECTIVES
e.g., For every child to read, write, speak, spell and listen at a level commensurate with his ability.
SPECIFIC OBJECTIVES
e.g., No. 1. For each child to comprehend printed materials at individual expectancy, as measured by the comprehension sub-test of the Gates-MacGinitie A, B, or C.

Figure 8.

We say such things as the Imperatives of Education typify the broad goals of society. They are those statements of societal needs which are so large and so complex that they are actually beyond the capacity of the school system to achieve acting in isolation. I think all of us are aware of this limitation on what the school can do. We say that closely related to societal goals and contributing to their achievement are those things that the schools can do and that these will typically, as a result of the kinds of activity we have just diagrammed for you, result in development of what we say are broad objectives. But, as Dr. Novick said earlier today, these typically are not of such a nature that their attainment is immediately and directly capable of recognition.

In our particular approach, our Educational Resource Management Design, it is envisioned that we will develop for each broad objective in a school system perhaps eight or ten specific objectives. We will refer to these as specific objectives because they have something within them that tells when they have been attained.

The specific objective that we are using here in this example is really one that has been developed by the Westport, Connecticut School System. Westport is one of our pilot districts, you will recall. They are working very hard in this particular area. Attainment of this specific objective speaks to attainment of the general objective. Attaining several such specific objectives would actually represent the attainment of the broad objective in our example. So, specific objectives in a certain number, whatever may be required, would represent the attainment of a broad objective. All of the broad objectives of a school system would constitute that school system's contribution to attainment of societal goals.

Now, remembering this, let's look at the development of some alternative programs to achieve objectives within a school system in our Educational Resource Management Design concept. (See Figure 9.)

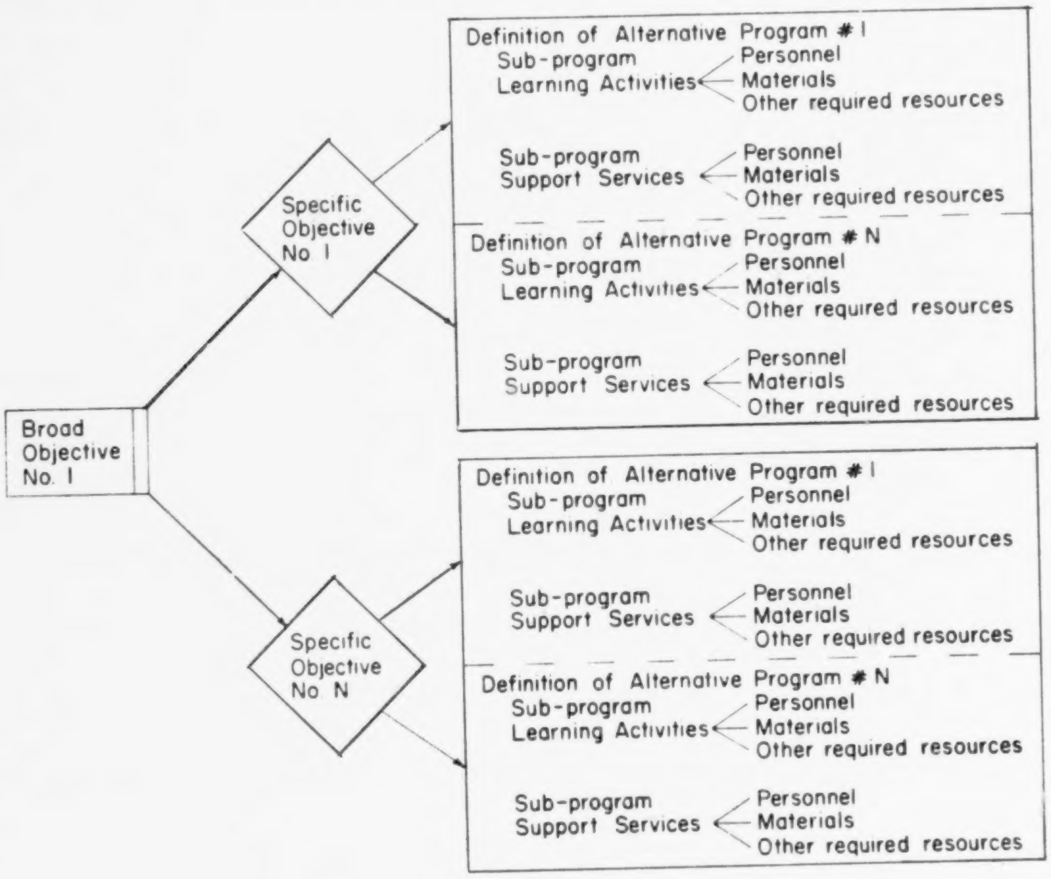

Broad Objective No. 1
Specific Objective No. 1
Specific Objective No. N
Definition of Alternative Program # 1
Sub-program Learning Activities
Personnel
Materials
Other required resources
Sub-program Support Services
Personnel
Materials
Other required resources
Definition of Alternative Program # N
Sub-program Learning Activities
Personnel
Materials
Other required resources
Sub-program Support Services
Personnel
Materials
Other required resources

Figure 9.

We start with that broad objective, say the example, "read, write, spell and listen, at a level commensurate with the ability of the child," and we move forward from that to at least one specific objective.

All right, we have a specific objective. Perhaps it is such as the one we had on the prior slide. Now, for that specific objective let us generate at least one program that will achieve it.

When we have generated this program we will find that in it we have identified sub-programs of learning activities and sub-programs of support activities. These, in turn, of course, will require the use of the resources already mentioned as inputs from society. Included will be the personnel, the materials and certain other resources which may be available in that community. Some may be available but not by purchase. Rather they may be available as direct contributions of time, special skills, geographic features and so on.

All right. Having developed one alternative program for the complete attainment of this specific objective in a certain span of time we now develop a series of other alternatives to the number of N, or however many we may think appropriate. Perhaps there should be at least three such alternative programs for each specific objective.

All right, let us look at some of the other specific objectives which would result, then, in the attainment of broad Objective Number 1. You can envision a series of these 1 through N, however it may be, and for each of these others we go through the same thing, develop a definition of Alternative Program Number 1, and subsequently other programs.

Now, out of this we have to determine which of the alternative programs we are going to use, and we start in this fashion here. (See Figure 10.)

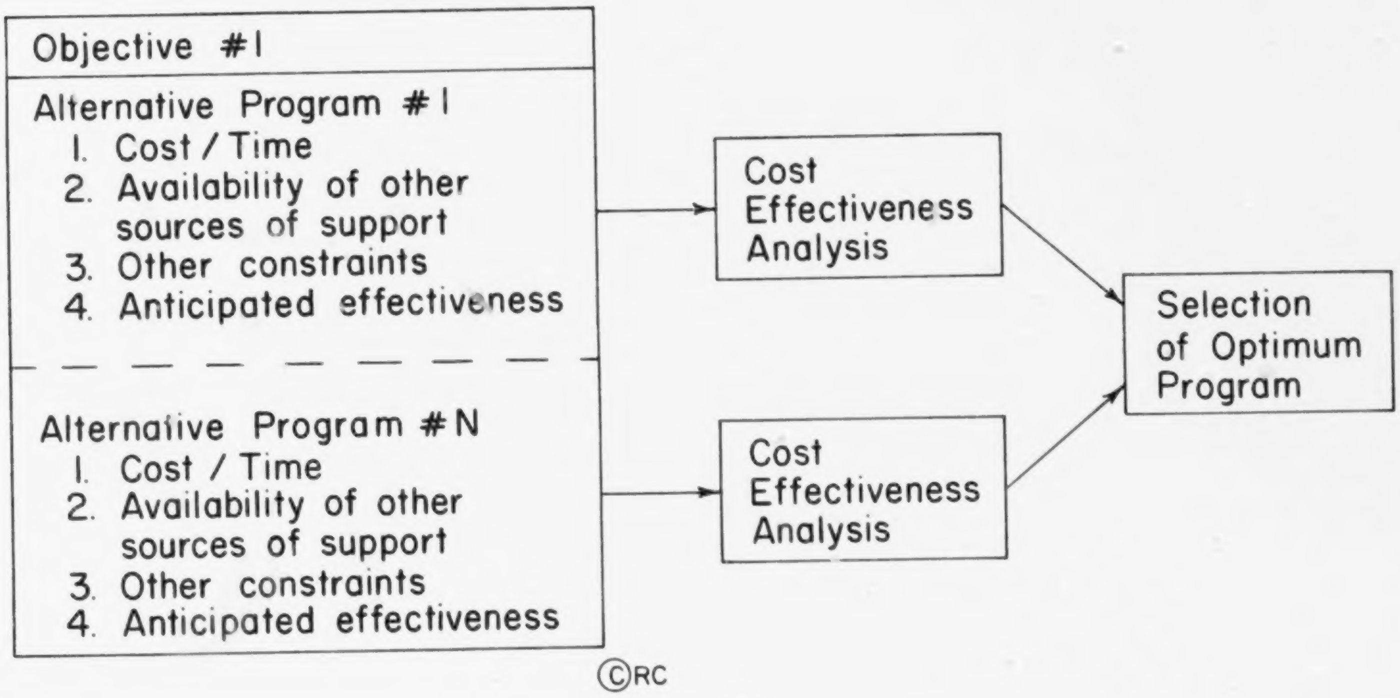

Objective #1
Alternative Program #1
1. Cost / Time
2. Availability of other sources of support
3. Other constraints
4. Anticipated effectiveness
Alternative Program #N
1. Cost / Time
2. Availability of other sources of support
3. Other constraints
4. Anticipated effectiveness
Cost Effectiveness Analysis
Cost Effectiveness Analysis
Selection of Optimum Program
©RC

Figure 10.

Let us take, say, just the specific Objective Number 1 from the top of Figure 9 and let us look at Alternative Program Number 1, the top one, in terms of cost and time and availability of other sources of support, other constraints that may be peculiar to it, anticipated effectiveness, et cetera, which in a general way will constitute for us in education our cost effectiveness analysis of that program in contrast with cost effectiveness analysis of each of the other programs, out of which we hope to select an optimum program.

Now, we find that having selected the optimum program, it is necessary to divide that optimum program. (See Figure 11)

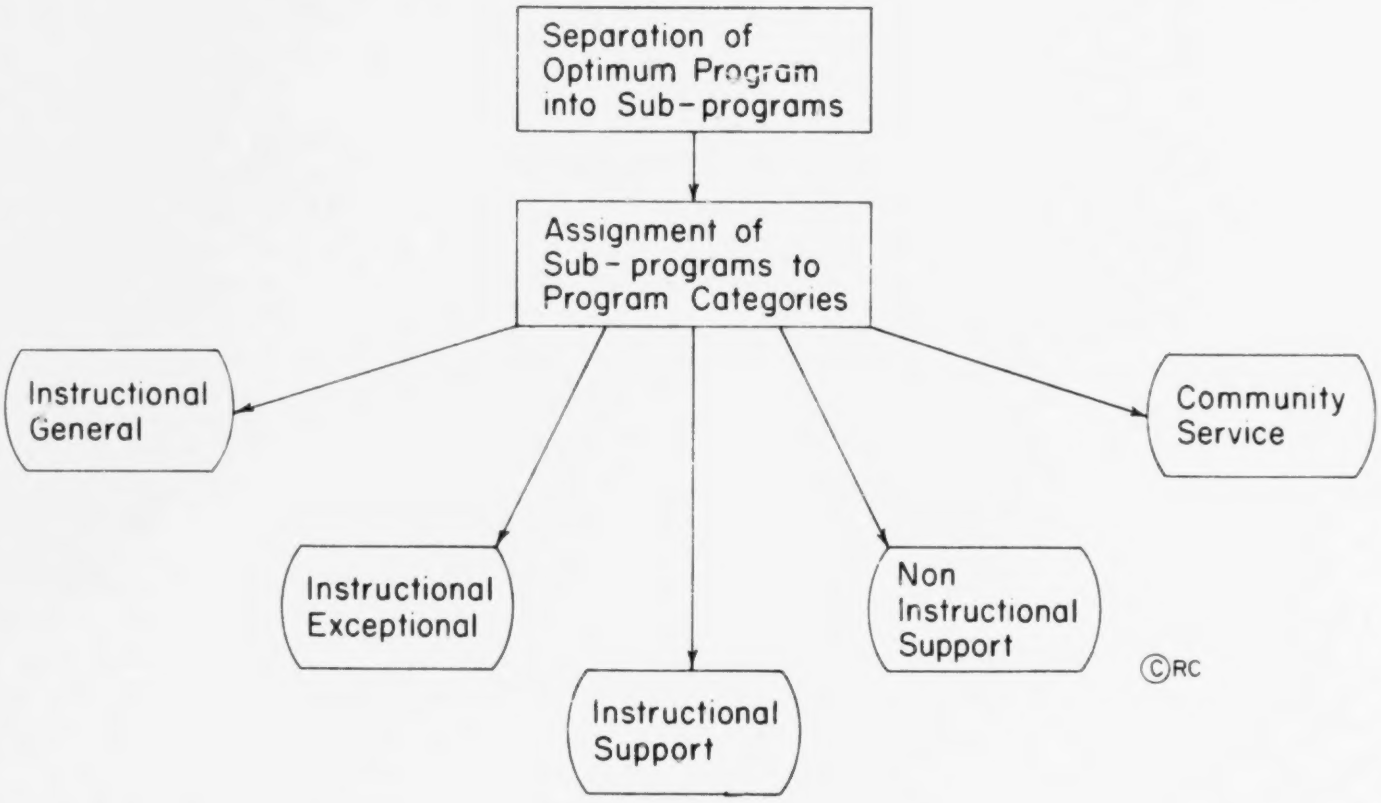

Separation of Optimum Program into Sub-programs
Assignment of Sub-programs to Program Categories
Instructional General
Community Service
Instructional Exceptional
Non Instructional Support
Instructional Support
©RC

Figure 11.

We divide that optimum program into the sub-programs and separate those into our functional program categories so that we have like activity with like activity for most effective, convenient and useful administration.

We are suggesting "instructional general" as being those programs of activity, learning activities, which are in support of the learning of the broad group of youngsters who are not considered exceptional.

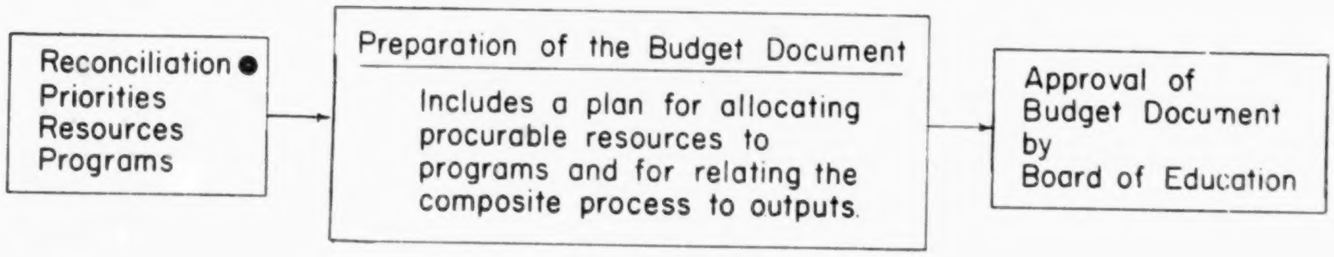
Our instructional-exceptional category we simply say is all of those instructional activities that are designed for the children who are either exceptional by reason of being gifted or exceptional by reason of being handicapped.

The instructional-support activity and service category, or grouping of subprograms, is all of those activities which are in direct support of either instructional general or instructional exceptional.

The non-instructional support would include such items that are not in direct support as general administration, the operation of the transportation system, the maintenance and operation of plant, et cetera, and finally we provide and suggest a community service program category, for those activities which the school system undertakes which are not defined as being within the legal, regular responsibility of the school system.

I think you can see how we have moved through the generation of objectives finally down to development of programs, selection of programs, at least tentatively, and assignment of these to individual programs.

Now, in the next frame, (See Figure 12), we will have to re-examine this selection for just a moment.


Reconciliation ●
Priorities
Resources
Programs
Preparation of the Budget Document
Includes a plan for allocating procurable resources to programs and for relating the composite process to outputs.
Approval of Budget Document by Board of Education

© RC

Figure 12.

Thus far examination of the model has brought us to where we have made a tentative selection of sub-programs and assigned these to categories; but the first thing that has to do with our definition of budgeting relates to the fact that there must be a final reconciliation of priorities, resources, and programs. It may well be that in practice we'll often have to re-cycle, go back and select other programs (which are not necessarily optimum ones) for utilization; or we may have to re-examine our total priority structure. But, in any event, within the area generally viewed by us as being budgeting, we see final reconciliation as a responsibility, plus the preparation of the budget document, and finally, approval of the Board of Education.

We define budgeting to also include accounting and reporting so let us examine quickly the accounting device we are suggesting to support E.R.M.D. (See Figure 13.)

Accounting Categories

Category	Examples	
	Major	Sub
Program	Instructional--General	Objectives re Reading
Location	Elementary Level	School X
Object	Salaries	Classified
Project	ESEA 89-10	Title
Fund	Building	Sale of Bonds

©RC

Figure 13.

We use five breakdowns. One we will call program. As an example of that, a major breakout within it would be instructional-general or instructional-exceptional or instructional-support, non-instructional support or community services and under it there might be sub-categories, as we would desire in our particular district.

We suggest a category called Location, where we may break the category up by sub-districts if we are decentralized, as in the case of large districts, or we may break it up by elementary and secondary levels or any other means we consider appropriate to break out. Then subdivisions such as "school" are provided. Theoretically we could go on from this to departments, and hopefully even some day, with our increasing technology, to individual students. This leads me to the observation that perhaps Educational Resource Management Design as one application of planning-programming-budgeting may not be as devoid of humaness as some would suppose.

Next we call attention to "Object" but not in the general sense we now use it. We think perhaps that the classifications "Salaries, Material, Capital Outlay and Other Expenses" might be enough major categories here, with appropriate sub-categories under those.

We do recognize the need for a project classification where we can pool together those things which a school system does on contract, as, for example, with the Federal Government. This is to accommodate the need to report such projects most conveniently.

And, finally, we recognize the need in most States for maintaining an identification of funds.

Out of all of these we could select theoretically any particular combination of information we would desire, and one of the things we are anticipating with the Douglas County District -- Lowell Baumunk, Superintendent -- just south of here -- is an attempt, at least, to develop an accounting approach utilizing this general format, which will be feasible and operable in the very small school districts that do not have data processing equipment.

Our sub-committee on accounting, that developed this format, Ray Holt, Emmett Moll, and Allen Dye, feel that most of the school districts that have the data processing equipment will have little difficulty with this kind of approach at the present time. And so we are going to concentrate just a little bit on seeing what can be done to take care of those districts that do not have data processing equipment. But let us look at the next elaboration of the model. (See Figure 14.)

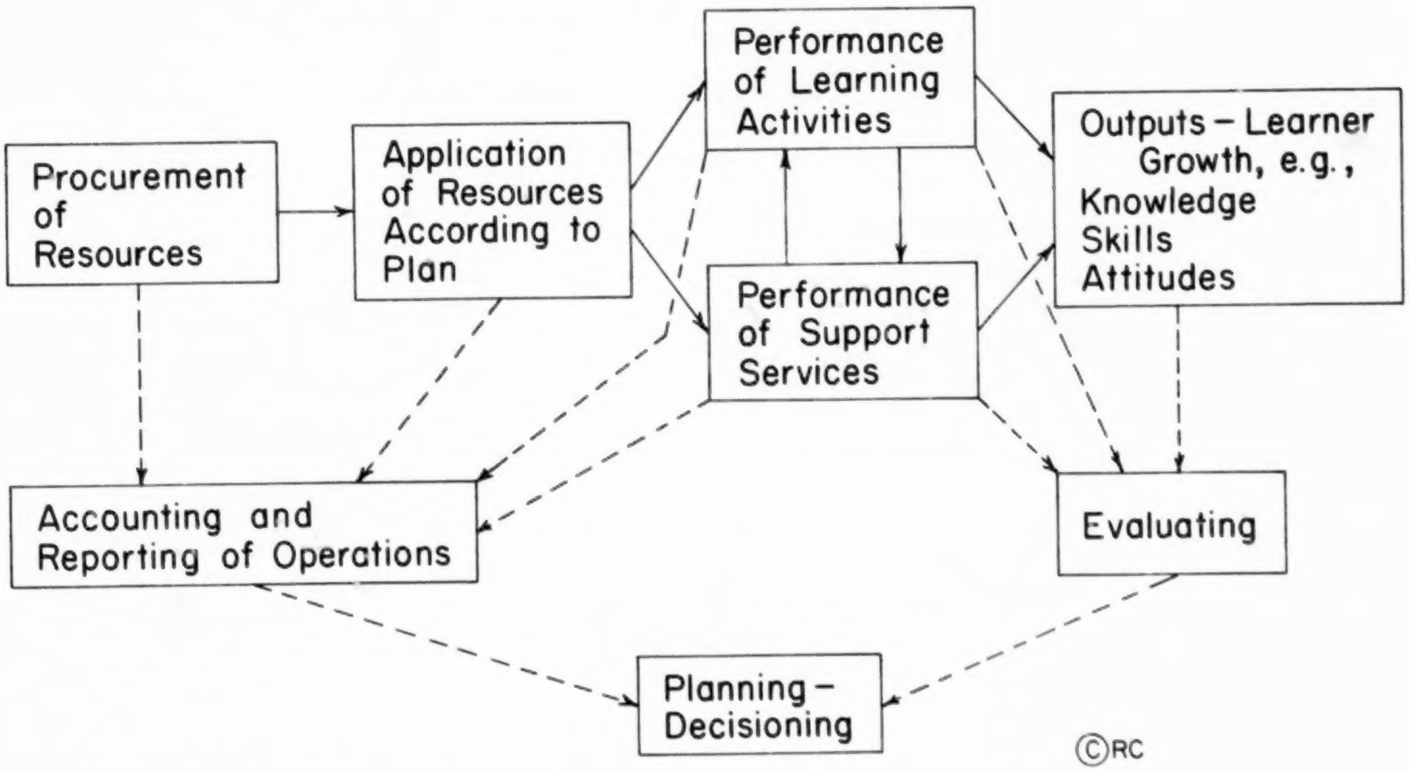

Performance of Learning Activities
Procurement of Resources
Application of Resources According to Plan
Outputs – Learner Growth, e.g., Knowledge Skills Attitudes
Performance of Support Services
Accounting and Reporting of Operations
Evaluating
Planning – Decisioning
©RC

Figure 14.

What we are showing here is a series of actual program points that are the concern of budgeting, accounting, reporting. These include the procurement of resources, the application of them to the various programs, and on to the final output of learning.

Now, we show at this point that the accounting and reporting of operations deals with these activities. The information flows from these to accounting and reporting of operations, and through that to planning and decisioning. At the same time this is going on, evaluation is also occurring. So we come, then, to the subject of evaluation. (See Figure 15.)

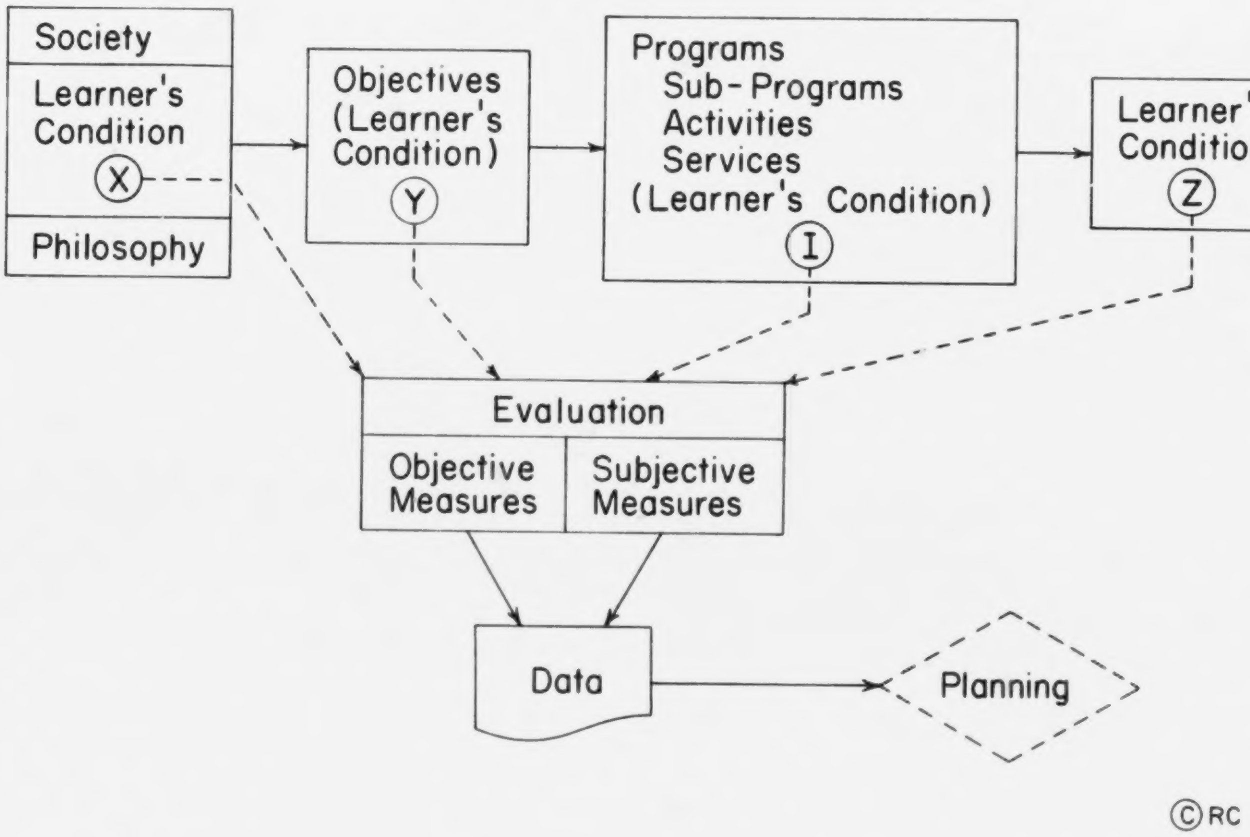

Society
Learner's Condition
X
Philosophy
Objectives (Learner's Condition)
Y
Programs
Sub-Programs
Activities
Services
(Learner's Condition)
I
Learner's Condition
Z
Evaluation
Objective Measures
Subjective Measures
Data
Planning
©RC

Figure 15.

You will recall the earlier reference to objectives as coming from society, learner condition and educational philosophy and you will recall the actual development of the objectives themselves. It occurs to us, as we think about evaluating, that it may be wise for us to do some comparison of the learner condition and our objectives for the learner condition. And so we amplify just a little bit what we would be comparing and developing as we move into this matter.

Here we have an X and a Y and we show the information flowing down to evaluation, and be sure that you see that we call for both objective and subjective measures to develop data which would flow to planning for its utilization.

Now, as we look at this, I think you might be interested to know that what we mean by the X over there is pupil description at initiation of program operation, and Y is our proposed description of the pupil at the end of the program. In other words, Y is our objective. (See Figure 16.)

X = Pupil description at initiation of program operation (entry characteristics)
Y = Proposed pupil description at end of program (objective)
I = Pupil description at any interim point of process
Z = Pupil description actually obtained at end of program
U = Unexpected outcomes
F = An unknown fraction
C = Change
© RC

$$Y = X + C$$

$$Y = X - C$$

$$Y = X + C_1 - C_2$$

$$Y < X$$

Figure 16.

Let us look at some of the possible relationships between the entry-behavior of the pupil and his proposed learning condition at the end of the program. We might find that the objective is equal to his entry condition, X plus a certain change. C equals Change. We might find that the objective is to delete certain behavior. We might find that our objective is to add certain behavior, and at the same time subtract certain other behavior. (Indicating right side of Figure 16.) Interestingly enough, it is theoretically possible to find that our objective is less than the entry capacity of the student, in which case it would seem to us that the kind of information thus revealed would be very important information for planning. It certainly would be very important for that particular student that he and groups of similar students should not have to go through an unnecessary and unmeaningful program of learning.

While these programs are in operation, if we were to take, at any interim point, a measure of the pupil's progress toward attaining an objective and do some comparing with our objective, theoretically these are some of the things we could find. (See center section of Figure 15 in conjunction with Figure 17.)

X = Pupil description at initiation of program operation (entry characteristics)
Y = Proposed pupil description at end of program (objective)
I = Pupil description at any interim point of process
Z = Pupil description actually obtained at end of program
U = Unexpected outcomes
F = An unknown fraction
C = Change
© RC

$I = X$

$I = X + U$

$I = FY + X$

$I = X + FY + U$

$I < X \neq Y$

$I = X \pm C = Y$

Figure 17.

We could find, for example, that I, the interim measure is equal only to the entry condition of the learner -- that the program is making no progress. We think this is important to planning-decisioning and the information should flow to them.

Or we could find that the interim measure has produced actually only some unexpected outcomes. If that is the case, I think that is of interest to planning.

Or it may have produced only a fraction of the objective Y plus the original condition X. Perhaps it has produced a fraction of Y plus some unexpected outcomes.

Unfortunately, it is theoretically possible that we will find the interim measure shows that the pupil's learning condition is less that it was when he entered the Program X and is still not equal to Y. It may well be he is regressing. This is unfortunate, but this is the kind of information that I think Dr. Curtis was referring to that we should be aware of if it is so. We might really be very fortunate and find the interim measure indicates that we have attained X plus or minus C, and it is equal to Y. We have done what we wanted to in a lesser time than we expected, in which case this is also of interest to the Planning and the Planning-decisioning group.

The final product, the outcome of the program, is now to be considered, and we let Z represent the pupil description that is actually obtained at the end of the program. (See Figure 15 in conjunction with Figure 18.)

X = Pupil description at initiation of program operation (entry characteristics)
Y = Proposed pupil description at end of program (objective)
I = Pupil description at any interim point of process
Z = Pupil description actually obtained at end of program
U = Unexpected outcomes
F = An unknown fraction
C = Change

© RC

$$Z = Y$$

$$Z = Y + U$$

$$Z = FY$$

$$Z = FY + U$$

$$Z = X$$

$$Z = X - U$$

Figure 18.

If we find it is equal to Y, we have attained our objectives, that is fine! If we find it is equal to Y plus some unexpected outcomes, these may be good or bad, but certainly the information is important to Planning and Planning-Decisioning. Z can perhaps be equal to only a fraction of our objective or a fraction of our objective plus some unexpected outcome, or we can obtain nothing or we may have regressed. These are things which can happen. Hopefully, they will have not. But as we operate this model with its emphasis on objectives and attaining objectives and utilizing optimum programs, this is the kind of information that we are presently seeing as being useful to the Planning and Planning Decisioning people.

Now, this has been with respect to the instructional kinds of activities and services, but let us consider just briefly the non-instructional activities. (See Figure 19.)

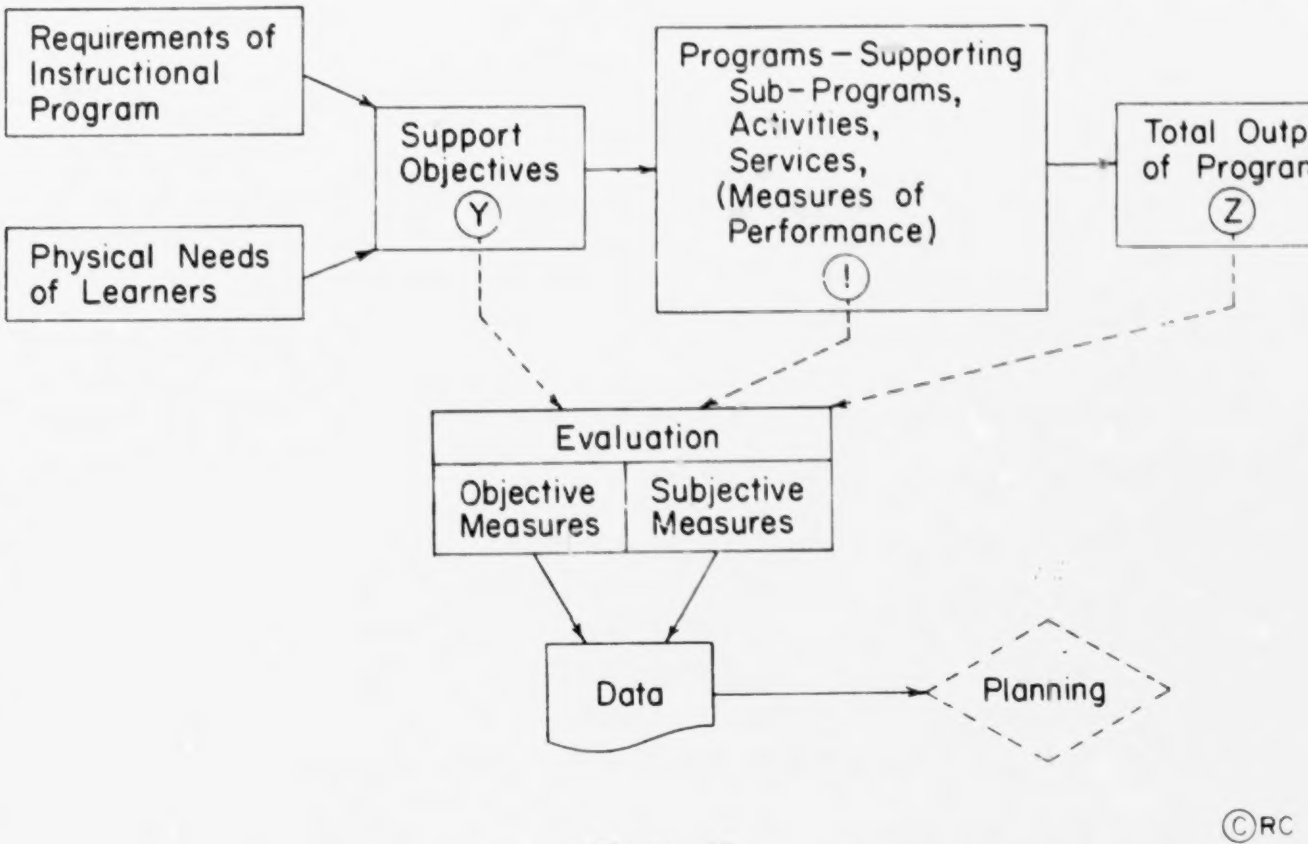

Requirements of Instructional Program
Physical Needs of Learners
Support Objectives
Y
Programs — Supporting Sub-Programs, Activities, Services, (Measures of Performance)
I
Total Output of Program
Z
Evaluation
Objective Measures
Subjective Measures
Data
Planning
©RC

Figure 19.

We show you that the origin of the non-instructional or support sub-programs would normally be, we think, the requirements of the instructional program and the physical needs of learners. In the slide, support sub-objectives are to be set forth in some fashion that we represent with the letter Y. The sub-programs are to be operated and will be subjected to evaluation at interim points. I represents the interim measure of progress or production. The final output will again be called "Z", and we will subject measures of Z to basically the same kind of analysis as we did the Z of the instructional program categories. In both cases the object of evaluation is to produce information of importance to Planning and Decisioning.

Now, this has presented for you a very hasty and, I know, rather superficial sketch of our general picture of a black box in the building. I'd like to summarize by looking again at this particular diagram. (See Figure 4.)

We have said that the parts of Program Planning-Budgeting-Evaluation System or Educational Resource Management Design, as we now envision it, consists of planning, with its emphasis upon objectives, of programming with an emphasis upon generating alternative ways to achieve those objectives over a multi-year time dimension.

We say that a part of Educational Resource Management Design is budgeting and nowhere have we suggested that the budget should be limited to one year; it should be set forth, as we see it, in terms of what is currently known about the attainment of the objective, and this does require time. We have shown you that time is one of our most important identified inputs or resources.

Finally, we say that E.R.M.D. includes evaluating -- evaluating progress in attaining outputs, and evaluating outputs to determine achievement of objectives.

We think that out of these four parts these events (See Figure 5.) are important, at least at this time, for giving you direction, and giving us direction as we attempt to develop finally more workable models. We think that identification of the inputs, the development of the objectives that we are going to seek in a given school system, the consideration of alternative programs, the analysis of them, the division of them into program categories, the program categories being instructional-general, instructional-exceptional, instructional-support, non-instructional support, and community service, and the operation of these programs to conclusion with evaluation of their outputs -- all of this constitutes a base for developing a good PPBE system for use in public education.

Ladies and gentlemen, this is our model as it presently stands.

This afternoon when you go into your group meetings for discussion of this, our pilot representatives and consultants will be scattered among all three of your groups. They will be available to you for specific answering of questions. I recognize that our time at this point is rather limited. I just want to use what little time I have for a wrap-up point of view and some pointing of your thinking towards the afternoon session.

At the conclusion of the group sessions, which start at 1:30, you will be handed a questionnaire where it is asked that you give some reactions and some appraisals both of the model as you have seen it and also of the situation that may exist in your State at the present time.

As Bill has mentioned to you earlier, we are planning eight Regional Conferences this fall. There is a place on the face of this questionnaire for you to identify which of those regions you are representing or whether you are from Canada, and we wish that you do so, so that we can collate by regions the information which you have given us and employ it in developing our programs for those Regional Conferences. This will be most helpful to us.

Ladies and gentlemen, it has been a real pleasure to make this presentation to you.

Summary of the Group Sessions

Excerpts from the Concluding Panel Session

Dr. William H. Curtis:

Ladies and gentlemen, the final session, as indicated, will be in the form of a concluding panel. I am reminded of one point before I begin the introductions and then ask for the first report. You were given questionnaires and asked to complete them prior to leaving. Please leave them on the tables outside if you have not already done so.

Next, I will present the members of the panel to you. On my right is Miss Sue Haggart, a technical specialist for the RAND Corporation and an associate of Dr. Novick.

Starting immediately on my left, representing the Chief State School Officers and the man who chaired the session of that group, Dr. Burnell Larson, Superintendent of the State of Nevada.

Dr. Novick you have already met.

Mr. Grayson, as the presiding officer today, you have met.

Dr. Kenneth Hansen of Washington State University is next. He is representing Dr. George Brain, a member of our Panel of Experts and also Chairman of the Committee on Assessment of Progress in Education.

The pattern of this afternoon will be as follows: we will ask each of the persons who either chaired or recorded for the three group sessions earlier this afternoon to take a few minutes to comment in any direction they may choose, either in the form of a report to us for the record or in the form of questions which they would like to list or both. Hopefully, we can answer most of your questions this afternoon; if not, we will get the answers for you later. After these three persons have reported, by agreement, all of these persons on the platform will serve as resource persons, as well as our consultants in the audience, any members of our Panel of Experts and any representative of our pilot districts, in order to answer any questions presented by these men.

I have asked Mr. Grayson as the presiding officer of the Conference, the President of our organization and the person who presided at the ASBO group session in this room this afternoon, to lead off with the initial comments, whatever he chooses to say.

Mr. Ernest C. Grayson:

I was very fortunate to have a large group of School Business Officials, and when you get this many together you can always come up with plenty of questions and comments.

One of the first concerns was, would the revision of Handbook II, which is currently under contract to be revised, give consideration to incorporating PPBES in the development of that manual?

I think the general consensus of opinion was that it probably would. Pete Perkins is here and I know he is taking down copious notes so we will be sure that it will be reflected.

Secondly, there was a question, would the slide presentation that was presented this morning be available for use? I think you mentioned to me that this is copyrighted and is still in the process of development and that there will be some changes made in it before the final slide presentation is made available later on.

Dr. William H. Curtis:

Yes, you are correct. During the next month there will be some revision of the slides as a result of today's meeting and subsequent meetings with our Committee of Consultants.

I have been making some notes here and I trust other members of the Panel have been doing the same. We will let you raise these questions, then I will try to allocate them for reply as we go along.

Mr. Ernest C. Grayson:

Fine. Another concern of this group this afternoon was, in a discussion on the basic programs, could there be some common agreement as to what these programs are? We were presented with these programs as the proposed model would envision, but there are probably some differences in opinions and some concerns in other areas of things that might be left off of some classification. Will there be some attempt to get down to specifics and not have, say, State Departments going one way, local districts going another and possibly our model system going another way? Is there some way we can get common agreement among the various educational organizations as to what the basic programs might be?

We also were concerned with the present budget procedures as to whether we would have two budgets if we got into this type of system, one which would be a line-item budget and the other being the proposed PPBES system. Would we have two budgets to work with in the development of this type of system?

Also, is there any idea of the costs of establishing a PPBES system, will it cost more, will it cost less? What are the implications for the district, should the accounting and reporting take precedence over decision-making and planning? What would be the costs, in other words, in going into a system of this type? There seemed to be quite a bit of hidden costs in this system that came to the surface after some of our experimental systems got into it.

Another question we had was, is the purpose of the project to become a standardized system for all districts? I think some opinion was expressed here that this would be a guideline or a model and not necessarily a standardized type of system.

Then what about the smaller districts where we have the superintendent and the bookkeeper, how would he fit into a system like this, will there be provision for small districts to develop this type of system?

Another concern was, I think, with the state laws, as to how they might affect implementing a program budgeting system. For instance, commingling of funds in a system, would this model have some way of taking care of state laws and so forth? Of course, it was thought that possibly the Education Commission of the States may need to help us out, if necessary, to get some uniformity.

Another question: Do the educational institutions themselves lend themselves to use as a decision-making or management type of control?

And then it was brought out, the outside forces that impinge upon management decisions such as the unions and other pressure groups in the community, how would they fit into this decision-making process, how would PPBES help to sell a budget to the taxpayers? I think generally it was agreed that it could present alternatives, it could present costs of education, and so forth, that might be helpful in selling a budget.

Finally, how do we get the State Departments of Education more involved in this project, because generally speaking, they would take the leadership in implementing a statewide system.

That concludes my questions.

Dr. William H. Curtis:

Thank you very much. Next, I would like to ask Dr. Larson if he has any comments on behalf of the Chief State School Officers.

Dr. Burnell Larson:

Thank you, Mr. Chairman.

I sensed a feeling among the representatives from the Chief State School Officers that there certainly is no resistance to moving into program budgeting. As a matter of fact, many of the states have already made some very clear and incisive inroads on this concept and procedure, and I think the rest of us are looking for ways to accomplish the same kinds of things. Many of us, however, have not had the explicit direction that some of the states seem to have had. I think most of you can allay any fears you may have that State Departments of Education are not going to consider this matter very, very seriously. Speaking for my own state, we are dedicated to the idea, and we will be doing a great many things in this during the next biennium, particularly as regards departmental operation and administration.

We feel that a development of program budgeting needs to be made for a state agency before it can reasonably be tried out in a pilot somewhere in the school districts.

Certainly it was reiterated that state leadership is required, and also that state financial help is needed. Along with this need it was expressed that perhaps we have not communicated very well, for example, to legislators in general and to state administrative officers in particular the ideas and the concepts of program budgets. I think this is where some of us have failed.

I know this is the case in my own state. We have started to talk too late and without sufficient good foundation information. The result has been an unwillingness on the part of legislators to assume responsibility for budgeting under the PPBS concept. One of the alternatives suggested for better communication with the legislatures was that we approach them with the idea that this concept could be included within a planning section in a state department of education and that this planning section could assume the responsibility for program budgets as one of its duties. I think most legislators agree now that state departments of education certainly need to be agents of change and perhaps each one of these state departments of education should have within its component organization one set of individuals whose duty it is primarily, perhaps, to work for change and to afflict the comfortable to accomplish it.

Several of the models being used across the country were referred to. I won't take the time to go into them. I think some of them are rather interesting and the approaches were certainly different from any that I had heard of.

One of the questions was, how can model districts sustain, without added financial support, an effort in promoting and establishing program budgets and the concepts and ideas that accompany the change?

A state department of education has a responsibility here as well as in securing funds for any state educational activity. A state department of education must be ready to point the way, logically, and with the weight of evidence behind it.

One of the basic and oft-reiterated points was that in order for program budgets and the concept to be well established and broadly designed, it should be open-ended and flexible, and that there must be alternative approaches which would respond specifically to needs of the various districts, since each may be unique and each may have its own very discreet and positive kinds of demands.

Dr. William H. Curtis:

Thank you very much, sir. I might state in passing that Dr. Larson has in his own state one of our pilot districts, namely, Clark County, which includes the area of Las Vegas . Also, Dr. Larson is a member of our National Liaison Committee representing the Council of Chief State School Officers.

Dr. Forrest Conner served as Chairman of the Administrators group but has requested Dr. Kenneth Hansen who served as the recorder to be the spokesman.

Dr. Hansen.

Dr. Kenneth Hansen:

I suspect that Forrest Conner asked me both to record and report in the vain hope that I would repeat his scintillating and introductory remarks (which he could not modestly do); but although they were scintillating, I won't report them. I will report, rather, what the other people said and the questions they raised.

The first question concerned the danger that the process of "clarifying our objectives" might constrict our thinking. That is, in the attempt to make our objectives so specific as to be programmatic and measurable, we would fail to include broader -- or even as Dr. Novick called them this morning, "fuzzy"-- objectives. However, there seemed to be the belief that as long as we realized that this was a problem, merely clarifying and making specific and even behavioral the objectives did not in any way limit the nature and the scope and the breadth and the depth of our educational objectives. That danger existed only if we let it happen.

Major questions were also raised about the paradox of the long-range nature of implementing such a system as this as against the immediate steps that needed to be done. Several of the spokesmen for the group addressed themselves to the thought that we must immediately tell our constituents that this cannot be done overnight; it may take a minimum of three to five years to get this program going. Nevertheless, there is no excuse for not taking the immediate steps of providing alternative objectives and alternative programs and the kind of long-range planning that does have to start now. The long-range nature of implementing this program gives us no warrant for not getting started on the immediate and sequential steps we can take.

This project itself can help provide some of those immediate steps toward the long-range implementation. For example: interim information and examples as fast as they are produced by the project without waiting for a completed report; more specific and explicit alternative objectives and alternative programs, not as examples of what should be but more as examples of what might be, the kinds of things that districts can actually use as examples of what they themselves should seek; and in-service training at multiple levels, because so many different levels of the educational enterprise must be immediately involved in this program. Especially the small districts will need this sort of help.

Our attention was also called to the need for the assumption by the superintendents and their staffs of their clear responsibility for educational leadership in providing the alternatives that are demanded--quoting again from Dr. Novick--that the name of the game is providing workable alternatives.

There was a good bit of concern, perhaps more than any other concern mentioned, with the fact that we at once need political involvement at all levels of the body politic and must at the same time be prepared to resist political pressure for the immediate institution of premature programs of this sort.

We need more and more to involve the political decision makers, not only in designing programs, because they are calling for them, but in understanding the great complexities of such an approach.

But throughout all of this discussion, I felt there was not any defensiveness in the questions and the comments; rather, an assured but not a relaxed attitude on the part of the participants because they were realizing, as so many spoke up on this topic, that this is not all new. It is part of the planning and change process with which we have only dabbled so far, but with which we do have a basic professional familiarity and a tremendous professional obligation.

I think maybe the best summary of this problem was given a few years ago by a former Assistant Secretary for Health, Education and Welfare, who called the PPBS System "an orderly arrangement of incomplete information." Our job now is to complete the information. Thank you.

Chairman Curtis:

I thank you, Ken.

In an effort to try and cover all of the other questions raised from the various groups, and I hope that each of the presenters will double-check me as I go down through my own list, I will start with some of the points or questions which Ernie Grayson raised.

One had to do with the proposed revision of the Handbook II. You are all familiar with Handbook II, and I guess all of you know by now that the United States Office of Education does propose to revise it. Also, Ernie made some reference to Pete Perkins because Pete's firm has been awarded the contract for the revision process.

Because I heard Pete answer this question precisely in the meeting with the School Administrators, I am going to ask him if he will take a minute to answer the question again. The question that Ernie raised for his group concerned the compatibility of the revision of Handbook II to the PPBS concept and especially to a project such as ours. Pete, are you willing to answer that?

Mr. Joseph A. Perkins, Jr.:

The Handbook II specifications provide for three phases: One, revision of the old chart of accounts, cleaning up the inconsistencies in the function/object area and updating the glossary of terms. Two, a general treatment of Planning, Programming, Budgeting Systems showing its relationship to the chart of accounts as a technical base to PPBS with a requirement that the contractor take into consideration and communicate with each major PPBS design project in the country. Three, show how the financial chart of accounts interfaces with the systems in the other U.S.O.E. handbook series dealing with facilities, pupils, staff and curriculum.

As of this moment the ASBO Research Corporation and the California Commission on School Budgeting and Accounting have the only two major projects in the country. Peat, Marwick, Mitchell and Co. as the contractor to assist the U.S.O.E. in revising Handbook II will have to be in constant communication with both projects. The Handbook II project is not a design of a PPB system, rather it relates the technical base, that is, the accounting system, to what the ASBO Research Corporation is doing. It should supplement and complement it, not overshadow it.

Chairman Curtis:

Thank you very much, Pete.

The next question relates to the slide presentation and the availability of it. The slide presentation, for the present, will not be available on a large scale. We propose to revise it further as we do more revision of the model, but we do expect that it will be available at all of the regional meetings in the fall. We do expect it will be available at the Professors' Conferences and at certain other major institutes or conferences. But for the moment, just to distribute it without the explanatory sections would not be practical, from our point of view. Later on, as we develop a higher degree of sophistication of the model, we expect to prepare printed materials concerning it. As I indicated to you, some time within the next two months we will send to each of you the proceedings of this meeting, including diagrams. Also, we will continue to send material to you as well as to other persons in positions of leadership across the nation to the extent that we feel it is feasible.

However, I would remind you of what I said in my presentation that we do not wish to be premature in distributing materials which in themselves might become the "final word" right at the beginning of the project.

The next question related to the basic programs. The question: Will we be presenting more specific examples of programs and objectives, etc., and if so, what are our plans in this direction?

I have asked John Gott if he would like to comment on this question. Our consultants have some thoughts on this matter, also. John will comment first.

Mr. John Gott:

In the first place, I'd like to call your attention to the fact that we are aware of the element of alternatives in the PPBES System, and we at this point in time are not willing to restrict the availability of alternatives in this area. Yes, we are interested in developing for you adequate examples of what can be done, of various ways of doing it. A number of our pilots are working on this. We are not in a position to commit. It is like a great many of the other questions Ernie raised having to do with implementation, to which we are, hopefully, now ready to turn our attention during the forthcoming months. We think that we will be able to give you better examples than we are able to give at the present time.

Chairman Curtis:

Is there anyone else on the panel who wishes to comment to this question? Sue.

Miss Haggart:

I would like to make a comment about alternatives. I seem to detect a different use of alternatives than I think Mr. Novick had in mind this morning. The activities you are doing right now in your districts or in your State Departments of Education are your programs. They comprise your base case, if you want to call it that. The alternatives that we are talking about, in generating alternatives, are alternative ways to achieve the objectives of the programs that you now have -- not alternative program structures. A program structure doesn't stay still or isn't static; it is dynamic in the sense that as new objectives make themselves felt and new programs are designed to meet those objectives, your program structure will change. So there is really no such thing as a permanent or alternative program structure.

Now, you can have a general program structure and certain districts will find slots in that program structure that they can fill and certain other districts will not have any input for particular slots. A good example is a unified district versus an elementary district. You can have a program budget structure for a unified district and the elementary districts can use almost the same inputs except they won't have any secondary education or any inputs to programs related to activities involved in secondary education.

The program structure for secondary education, broken up by objectives, (two general ones might be preparing students for employment or preparing students for further education) might be the same as a program structure designed to be a national program structure. The elementary district, however, would have no input to those programs.

As I said, the alternatives you seek are the alternative ways to achieve your objectives, not alternative program structures as I seemed to detect. I could be wrong. But check on the idea of alternatives, as it relates to the considerations in developing a program structure.

Mr. Grayson:

Bill, I think our group was trying to think in terms of will the project involved develop a list of programs that there would be some common agreement on. I think this is what we were concerned about. Is this out of the question?

Chairman Curtis:

John, do you want to answer that? We have talked about some of the supplementary material.

Mr. Gott:

I can discuss it, but I can't answer it.

Chairman Curtis:

That is what I mean. I am referring now to our discussions of about two or three weeks ago in the supporting data beyond the basic chapters.

Mr. Gott:

I am not quite sure that I understand what you are referring to, Bill. You may wish to supplement this. I need to react just a little bit to what Miss Haggart said in the matter of alternatives. If, for example, the objective is to install a PPBES System in your school system, then we recognize that you may wish to consider various alternatives in this sense, also, and I think this may have given rise to the apparent confusion a moment ago because I was speaking in that particular sense at that point in time.

Now, with respect to these basic programs, one of the questions that has hung in our minds is whether a basic organization of programs will be static and standardized throughout the United States in all systems and in all organizations. One of the basic questions is whether or not the requirements of state and federal policy decision-making are such that PPBES will have to be in a standard format. Ideally, we would like to leave to each district the latitude to organize its programs in categories which may be most appropriate for its particular circumstance, and yet we recognize the possible constraint of requirement for state and federal level policymaking such that standardization would be required.

At this point in time, these are just two of the points of consideration and the matter is not, as I see it, resolved. We will be attempting to deal with it in the chapter outline. If you will refer to that, you will find some of the points at which we intend to treat it in greater depth later.

Chairman Curtis:

The only point I would add, John, in addition to covering these items in the basic chapters, I think we had in mind that in some supplementary material in the document we might give other examples. We are definitely against the idea of developing a standardized model that will constrain the efforts of an individual school system. We recognize the value of sharing of data, comparisons, so forth. There must be an overall pattern.

How far down the pathways we go with the overall pattern I know none of us is prepared to answer that question as yet. But I would like to go back again to our statements of this morning. We are doing everything possible to develop a model which will give each and every one of you "room in which to move."

I note, John, that you have answered one or two other questions in the process and we are down to about two minutes. As yet we have not answered the question of whether we are going to require two budgets in the transition process.

Will you please answer this question, Dr. Novick?

Dr. Novick:

I think we have to recognize that the program budget is planning-oriented. This doesn't mean we are making a forecast. We are laying out a plan. In this, the first year is next year's budget. Now, this again should not be taken to mean that you have to change the existing budget structure. The proposal has always involved the concept of a crosswalk, and Secretary McNamara I think did this best when he said to the Congress, "I will give you the posture statement," meaning that "I will lay out the long-range plan of the Department of Defense. The Assistant Secretary or Comptroller will give you next year's budget in the traditional pattern."

This is a very important thing in dealing with legislators, because they do not want to change their habits, and it is not necessary that they change their habits.

The only other statement I want to make is, remember that a plan is not only flexible, but a good plan aborts almost as soon as it is completed. In other words, you take, let us say, a year to make up a plan. In that period a great many things happen. You are, let us say, administering that plan for six months. A great many new things happen. It is a very bad plan if at the end of the first six months of its operation it cannot be susceptible to very major revision. You may be locked in, as the automobile people are, with machine tools and other long lead-time items that you ordered eighteen months in advance. But even then you may occasionally have to junk the cost already incurred. Another thing to remember is when we talk about alternatives, we mean alternative ways of looking at things. This may mean alternative program structures, this may mean alternative program elements for implementing a program. But the one thing I would like to leave in your minds is the fact that the long-range plan is just that. It is not a forecast. You are not putting yourself in cement. You are, rather, saying as of this point in time, given this information these are the decisions we make. Six months later, given new information, given new conditions, you may make significantly different decisions.

Chairman Curtis:

Thank you very much, sir.

I think you have the answer in that statement concerning the dual budgets. There is one other question that I do wish to answer quickly. In the interest of time I shall try to be brief.

There was a question raised concerning the small districts, recognizing the fact that in this nation of ours over half the districts, if I remember my statistics correctly, would have less than 2,000 youngsters each, and we still have approximately 20,000 districts. We must have a deep concern, of course, for the small school district which does not have access to some of the newer phases of technology, at least not at the present. However, we are entering into a special agreement with the Douglas County School District in a special experimental project to make sure that we are reflecting some of the problems of the smaller district. Also working with Douglas County probably will be the State Department and the University here in Colorado.

Time has run out on us, ladies and gentlemen. In a moment or two we will conclude this conference. Before doing so, I wish to thank the panel participants.

My thanks also to the Committee and to all of you that worked together in this team effort, and certainly you in the audience who took time to be with us.

Appendices

EDUCATIONAL RESOURCE MANAGEMENT DESIGN

PPBES in Education

Chapter Outline for the Final Documentation

PREFACE (Including Origin of the Project)

I. INTRODUCTION

II. CONCEPTUALIZATION OF THE EDUCATIONAL RESOURCE MANAGEMENT DESIGN

III. PLANNING

IV. PROGRAMMING -- ANALYSIS OF ALTERNATIVES

V. BUDGETING

VI. EVALUATING

VII. ORGANIZING FOR IMPLEMENTATION

VIII. INTRA-STATE AND INTER-STATE PROBLEMS

IX. IMPLICATIONS

RESEARCH CORPORATION
OF THE
ASSOCIATION OF SCHOOL BUSINESS OFFICIALS
An Educational Research Organization, Incorporated Not for Profit

2424 West Lawrence Avenue, Chicago, Illinois 60625
Telephone: Area Code 312; 728-3204

ADDRESS REPLY TO: DR. WILLIAM H. CURTIS
RESEARCH PROJECT DIRECTOR

List of Participants
at the
FIRST NATIONAL CONFERENCE
on
PROGRAM PLANNING-BUDGETING-EVALUATION SYSTEMS

Ramada Inn South, Denver
Tuesday, June 10, 1969

The Officers and Members of the Board of Directors of the Research Corporation of the Association of School Business Officials

President: Ernest C. Grayson, Louisville, Kentucky
President-Elect: Dr. Ridgley M. Bogg, Great Neck, New York
Vice-President: Dale Douglas, Dallas, Texas
Directors:
  Donald I. Pryor, Edina, Minnesota
  Henry J. Benningen, Winnipeg, Manitoba
  Robert W. Walker, Lansing, Michigan
  George R. Babigian, Winnetka, Illinois
  John W. Boyle, Kent, Washington
  John T. Lucas, Kettering, Ohio
Executive Committeeman: Thomas A. Linton, Milwaukee, Wisconsin

Past Presidents:
  H. C. Bleckschmidt, Normandy, Missouri
  H. Spilman Burns, Baltimore, Maryland

Chairman, Exhibitors Advisory Committee:
  C. H. Clawson, Cleveland, Ohio

Director of Research:
  Dr. Charles W. Foster, Chicago, Illinois

CHIEF STATE SCHOOL OFFICERS OR THEIR OFFICIAL REPRESENTATIVES

Alaska: Clifford R. Hartman, Commissioner
Arizona: Sarah Folsom, State Superintendent
California: Peter Mysing, Fiscal Officer
Connecticut: William H. Flaharty, Deputy Commissioner
District of Columbia: William R. Manning, Superintendent
Florida: H. J. Waters, Coordinator of Planning
Hawaii: William A. Waters, Deputy Superintendent

Illinois: Warren Evenson, Assistant Superintendent
Maine: Kermit Nickerson, Deputy Commissioner
Maryland: Quentin L. Earhart, Associate State Superintendent
Massachusetts: Douglas A. Chandler, Associate Commissioner
Minnesota: F. D. Bright, Deputy Commissioner
Montana: John P. Campbell, State Aid Administrator
Nevada: Burnell Larson, State Superintendent
New Jersey: Francis Pinkowski, Assistant Director,Federal Assistance
New Mexico: Dr. Merrill Redemer, State Dept. of Education
New York: Gordon M. Amback, Special Assistant to the Commissioner for Long-Range Planning
Ohio: John Parsons, State Department of Education
Oregon: Jesse V. Fasold, Deputy Superintendent
Rhode Island: Ralph S. Daniels, Executive Research Consultant
Utah: Walter D. Talbot, Deputy Superintendent - Administration
Wisconsin: William C. Kahl, State Superintendent
Wyoming: Roger H. Hanson, Assistant State Superintendent

PRESIDENTS OF THE STATE ASSOCIATIONS OF SCHOOL BUSINESS OFFICIALS OR THEIR OFFICIAL REPRESENTATIVES

Alberta: Alec W. Boychuk, President, Stony Plain
Arizona: Norman Willis, President, Tucson
Connecticut: William Mulkeen, President, West Hartford
Florida: Gladys Earnest, President, Deland
Idaho: Mat Warr, President, Burley
Illinois: Roy S. Ricketts, President, Peoria
Indiana: James W. Angstadt, Vice President, Muncie
Iowa: Glenn Selzer, President, Cedar Rapids
Kansas: W. R. Whitehead, President, Shawnee Mission
Kentucky: James D. Ishmael, President, Lexington
Louisiana: John McConathy, President, Benton
Manitoba, Allan C. Patterson, President, Carman
Maryland: John E. Tritt, President, Frederick
Massachusetts: James R. MacInnes, President, Lexington
Michigan: Melvin I. Blunk, President, Plymouth
Minnesota: E. J. Young, President, Hopkins
Nebraska: Marvin D. Maurer, President, Grand Island
New Jersey: Frank L. Witman, President, Freehold
New Mexico: T. W. Schettler, President, Las Cruces
New York: Andrew C. Bourke, President, Scotia
North Dakota: Harold C. Gulbrandson, President, Fargo
Ohio: Floyd E. Frederick, President, Warren
Ontario: J. F. Tummon, President, Kitchener
Oregon: Vernon W. Smith, President, Eugene
Pennsylvania: Henry B. Decker, President, Elkins Park
Rocky Mountain: J. O. Reed, Cheyenne, Wyoming
Saskatchewan: P.T.A. Trew, President, Arcold
South Dakota: Jerry Eggen, President, Watertown
Southeastern: James D. McCullough, President, Chattanooga
Tennessee: Billy Evans, President, Columbia
Texas: Roy Wood, President-Elect, Arlington
Utah: Arthur L. Bishop, President, Murray
Virginia: L. S. Cashwell, President-Elect, Richmond
Washington: Dale L. Buckley, President-Elect, Seattle
Wisconsin: Ralph Lenz, President, Sussex
Wyoming: W. A. Savage, President

PRESIDENTS OF THE STATE ASSOCIATIONS OF SCHOOL ADMINISTRATORS OR THEIR OFFICIAL REPRESENTATIVES

Alabama: George L. Layton, President of the ASA, Anniston
Alaska: Don E. Fridley, President of the School Superintendents Association, Anchorage
Arizona: George Smith, President-Elect of the ASA, Mesa
Connecticut: Hugh M. Watson, President of the Association of Public School Superintendents, Glastonbury
Amanda J. Berry, President of the Association of Rural School Superintendents, Falls Village
Illinois: Dr. Van Miller, President-Elect of the ASA, Champaign
Iowa: Richard L. Kinkead, President of the ASA, Cherokee
Kentucky: Oran C. Teater, President of the ASA, Paintsville
Louisiana: J. O. Lancaster, President of the School Superintendents Association, Vidalia
Maryland: Royd A. Mahaffey, President of the Association of School Superintendents, Salisbury
Michigan: Dr. Austin Bates, Executive Secretary of the ASA, East Lansing
Richard N. Speicher, President of the Association of Intermediate School Administrators, Rudyard
Minnesota: Harold R. Enestvedt, President-Elect of the ASA, St. Louis Park
Rudolph W. Siewert, President of the Association of County Superintendents, Chaska
Mississippi: Herbert S. Hoff, President of the ASA, Union
J. H. Talley, President of the Association of County Superintendents, Raleigh
Missouri: Dillard A. Mallory, President of the ASA, Buffalo
Montana: Clifford A. Harmala, President of the ASA, Glendive
Carolyn M. Frojen, President of the Association of County Superintendents, Missoula
Nebraska: Martin Dunklau, Asst. Superintendent, Business Affairs, Omaha
Nevada: Dayle K. Rust, President of the ASA, Las Vegas
New England: John W. Wallace, Vice President of the New England Association of School Superintendents, Newington, Connecticut
New Hampshire: William Grass, Jr., President of the School Superintendents Association, Littleton
New Jersey: Arthur G. Martin, President of the ASA, Moorestown
New York: John Skawski, President of the Council of School District Administrators, Canandaigua
North Carolina: Charles H. Chewning, Sr., Vice President of the ASA, Durham
North Dakota: August L. Spiss, President of the ASA, Mandan
Oklahoma: John K. Hubbard, President of the ASA, Noble
Oregon: James W. King, member of the ASA, Lebanon
Thomas J. Sommerville, President of the Association of Intermediate and County School Superintendents, Portland
Rhode Island: Ian D. Malcolm, President of the School Superintendents Association, Barrington
South Carolina: Donald L. Crolley, President of the Association of School Superintendents, Union
South Dakota: Dayle F. Meyer, President of the ASA, Webster
Otto Strobel, President of the County Superintendents Association, Leola

Texas: W. C. Andrews, President of the ASA, Gregory
Utah: Sherman W. Wing, President of the Association of School Superintendents, Provo
Washington: Walter Hitchcock, President of the ASA, Kennewick
John Amend, Member of the County and Intermediate Districts Superintendents Association, Tacoma
Wisconsin: Elden M. Amundson, President of the ASA, Plymouth
Wyoming: Myron Basom, President of the ASA, Laramie

COMMITTEE OF CONSULTANTS

Dr. Sam W. Bliss, Director of the Bureau of Field Studies, Southern Illinois University, Carbondale, Ill.
Dr. James W. Colmey, Director of Educational Research, Memphis State University, Tennessee
Dr. Creta D. Sabine, Principal, South School, Casa Grande District, Arizona
Frank G. Sibley, Director of Fiscal Planning and Control, St. Louis Schools, Missouri
Sam B. Tidwell, Professor of Accounting, Michigan Technological University
Joseph D. Woodley*, Director of Administrative Services, Metropolitan Denver Sewage Disposal District, Colorado

NATIONAL LIAISON COMMITTEE

Representatives of the American Association of School Administrators:

Jack L. Frisk, Superintendent, Yakima, Washington
John T. Lackner, Deputy Superintendent, St. Paul, Minnesota

Representative of the Council of Chief State Officers:

Burnell Larson, Superintendent of Public Instruction, Nevada

Representative of the Education Commission of the States:

Henry Cone, Director of Elementary-Secondary Educational Services for the Commission

Representative of the National Association of Secondary School Principals:

Dr. Owen Kiernan, Executive Secretary of the Association

Representative of the National Association of State Boards of Education:

Emil A. Koehn, President Elect of the Association

Representative of the National Educational Finance Project:

Oscar Hamilton, member of the staff of the Project

---

*Mr. Woodley is Chariman of the Local Planning Committee for the National Conference.

Representative of the National School Boards Association:

Dr. Harold V. Webb, Executive Director of the Association

Representative of Higher Education:

Dr. J. Allan Thomas, Associate Professor of Education,
The University of Chicago

Representative of Business and Industry:

Newell V. Risdall, Vice President, Smith System Mfg. Co.,
Minneapolis, Minnesota

PANEL OF EXPERTS

Dr. Frederick W. Hill, Deputy Superintendent, New York City Schools

Dr. David Novick, Head, Cost Analysis Department,
RAND Corporation

RC ASBO PROGRAM BUDGETING RESEARCH COMMITTEE

Chairman:

James McAllister, Phoenix, Arizona

Members:

Dwaine Anderegg, Racine, Wisconsin
Joseph H. Anthony, Clearwater, Florida
Robert J. Baker, Rochester, New York
William H. Barbour, Jr., Los Angeles, California
Amos E. Bassett, Jr., West Chester, Pennsylvania
Dr. Paul Bethke*, Denver, Colorado
Jeanette Bragin, Brooklyn, New York
Leo J. Burke, Boston, Massachusetts
Francis J. Coleman, Mount Prospect, Illinois
William G. DeYoung, Kinnelon, New Jersey
William E. Endicott, Rochester, New York
Myron Ernst, Bellevue, Washington
Herbert Goodall, Royal Oak, Michigan
Dr. LaMar L. Hill, El Monte, California
Jerry Jones, Greendale, Wisconsin
J. A. Jungherr, Pearl River, New York
Charles P. Lloyd, Salt Lake City, Utah
Robert Loss, Kenosha, Wisconsin
John R. Miller, La Porte, Indiana
Ralph L. Muller, Muskegon, Michigan
Benjamin R. Reed, Ossining, New York
Dr. Donald R. Thomsen, Memphis, Tennessee
James P. Vomhof, Shawnee Mission, Kansas
Dr. John F. Young, Fort Wayne, Indiana

*Dr. Bethke is a member of the Local Planning Committee for the National Conference

DADE COUNTY, FLORIDA REPRESENTATIVES

Dr. H. LaMarr Rice, Project Director
J. Troy Earhart, Educational Research Assistant
James A. Hale, Fiscal Research Assistant

REPRESENTATIVES OF THE EIGHT PILOT SCHOOL DISTRICTS

Clark County School District, Nevada:
  Not in Attendance
Douglas County School District, Colorado:
  Lowell Baumunk*, Superintendent
Herricks Public Schools, New York:
  Haskell E. Paige, Assistant Superintendent of Business
Memphis City Schools, Tennessee:
  E. R. Holt, Coordinator of Business Affairs
Milwaukee Public Schools, Wisconsin:
  Emmett J. Moll, Executive Director, Budget Planning
Montgomery County Schools, Maryland:
  Dr. James W. Jacobs, Director, DEMIA
Peoria Public Schools, Illinois:
  Allen F. Dye, Director of Accounting and Business Services
Westport Public Schools, Connecticut:
  Dr. Charles Rudiger, Assistant Superintendent of Schools in Westport

SPECIAL GUESTS

Dr. Forrest E. Conner, Executive Secretary, American Association of School Administrators
Dr. Donald Dafoe, Executive Secretary, Council of Chief State School Officers
Sue A. Haggart, Technical Assistant to Dr. Novick, RAND Corporation
John A. Hulbert, Executive Officer, Advisory Commission on School District Budgeting and Accounting, California
James E. Mitchell, Director, Midwestern States Educational Information Project
Joseph A. Perkins, Jr., Peat, Marwick, Mitchell and Co.
Dale H. Scott, Chairman, Advisory Commission on School District Budgeting and Accounting, California
Dr. Arch Steiner, Research Associate, Elementary and Secondary Education Research, U.S. Office of Education
Mede Abbott, Jefferson County, Colorado
Dr. Kenneth Hansen, representing Dr. Brain

RC ASBO STAFF

Dr. William H. Curtis, Research Project Director
John W. Gott, Research Associate
Donald M. Levine, Research Associate
Robert J. Plomin, Assistant to the Project Director

*Mr. Baumunk is a member of the Local Planning Committee for the National Conference.

SUMMARY OF FINDINGS

FROM ANALYSIS OF REPLIES TO THE QUESTIONNAIRES

WHICH WERE DISTRIBUTED TO THE PARTICIPANTS OF

THE NATIONAL CONFERENCE

by John Gott

Research Associate to the Project
of the Research Corporation of ASBO

SUMMARY OF FINDINGS
FROM ANALYSIS OF REPLIES TO THE QUESTIONNAIRES WHICH WERE DISTRIBUTED TO THE PARTICIPANTS OF THE NATIONAL CONFERENCE

by John Gott

Research Associate to the Project

1. The responding groups perceived school business officials as most aware and classroom teachers as least aware of PPBES. (See Table 2.)

2. Of the groups inquired about, legislators and school business officials were perceived as being the ones most in favor of adoption of some form of PPBES. (See Table 3.)

3. The replies indicated a belief among the respondents that adequacy of selected skills requisite for operation of PPBES in education is least in schools of under 2,000 pupils and highest in schools of over 5,000 pupils. However, the generally low range of mean composite ratings (1.5 to 2.4) supports the view that much in-service training will be required to support any wide spread implementation of PPBES. (See Table 4.)

4. The respondents were most sure (4.5 mean composite ratings) that the RC ASBO Educational Resource Management Design (1) will in use produce increased precision in identifying the objectives for which a school system is responsible, and (2) provides an increased emphasis upon relating activities and services to specific objectives. The lowest mean rating of all respondents, still markedly in the area of agreement (3.9), was accorded the statement that use of ERMD will increase effectiveness of communication between educators and legislators. (See Table 5.)

TABLE 1. ANALYSIS OF PARTICIPATION IN COMPLETING QUESTIONNAIRE

Group*	Number Attending Conference	Number Responding to Questionnaire	Percentage of Response
Chief State School Officer or Representative	25	22	88%
State Presidents of AASA Organizations	41	33	80%
State or Province Presidents of ASBO Organizations	37	28	76%
TOTALS (For above groups)	103	83	81%

*Note: persons other than in the groups listed were deemed to not constitute a definitive group for the purposes of this study.

TABLE 2. PERCENTAGE OF RESPONSES INDICATING PERCEIVED GENERAL AWARENESS OF PPBES AMONG SELECTED GROUPS

	Groups reported on:						
Respondent Group	Legislators	General School Admn.	School Business Offls.	Principals	Classroom Teachers	School Board Members	State Educational Organization Staffs
Chief State School Officers	73%	82%	86%	73%	32%	67%	76%
State AASA Presidents	76%	82%	94%	55%	45%	64%	88%
State ASBO Presidents	36%	72%	96%	35%	18%	48%	86%
Composite All Respondents	61%	78%	93%	54%	33%	59%	86%

TABLE 3. PERCEIVED ATTITUDE OF SELECTED GROUPS TOWARD ADOPTION OF SOME FORM OF PPBES

	Groups Reported on:						
Reporting Group	Legislators	General School Admn.	School Business Officials	Principals	Classroom Teachers	School Board Members	State Educational Organization Staffs
Chief State School Officers	3.3	3.4	3.4	2.9	2.3	3.1	3.1
State AASA Presidents	3.3	3.3	3.3	3.0	2.7	3.2	3.2
State ASBO Presidents	3.1	3.0	3.1	2.9	2.8	3.0	2.9
Composite All Respondents	3.3	3.1	3.3	2.9	2.6	3.1	3.0

NOTE: Indices were obtained by weighting responses as follows and then averaging:

Strongly favoring the action:	4 pts.
Some interest in the action:	3 pts.
No interest in the action:	2 pts.
In strong opposition to the action:	1 pt.

TABLE 4. ESTIMATES OF ADEQUACY OF SELECTED SKILLS TO IMPLEMENT SOME FORM OF PPBES

	Reporting Groups:			
	Chief State School Officers	State AASA Presidents	State ASBO Presidents	Composite, All Respondents
In Schools Under 2,000 Pupils				
1. Formulating Objectives	1.4	1.7	1.4	1.5
2. Devising Strategies	1.4	1.6	1.6	1.5
3. Accounting for Resources	1.6	1.6	1.3	1.5
4. Evaluating Achievement	1.8	1.8	1.4	1.7
5. Planning and Decisioning	1.8	1.9	1.6	1.8
In Schools, 2,000-5,000 Pupils				
1. Formulating Objectives	1.8	2.1	1.6	1.8
2. Devising Strategies	1.7	2.0	1.7	1.8
3. Accounting for Resources	1.8	2.0	1.6	1.8
4. Evaluating Achievement	1.9	2.0	1.7	1.8
5. Planning and Decisioning	2.1	2.2	1.8	2.0
In Schools Over 5,000 Pupils				
1. Formulating Objectives	2.3	2.4	2.0	2.2
2. Devising Strategies	2.3	2.4	2.3	2.3
3. Accounting for Resources	2.2	2.5	2.1	2.3
4. Evaluating Achievement	2.2	2.3	2.2	2.2
5. Planning and Decisioning	2.4	2.5	2.3	2.4

NOTE: Indices were obtained by weighting responses as follows and then averaging:

Is generally adequate to meet requirements of ERMD: 3 pts.
Exists but will have to be improved to meet requirements of ERMD: 2 pts.
For practical purposes of ERMD, does not exist: 1 pt.

TABLE 5. RATINGS OF ERMD AS TO ADEQUACY IN RELATION TO SELECTED STATEMENTS OF ASSUMED REALITY.

	Group providing the rating:			
Statements*	Chief State School Officers	State AASA Presidents	State ASBO Presidents	Composite, all Respondents
1. Model Relates Production to Objectives	4.4	4.2	4.1	4.2
2. Model Projects Cost Over Time	4.0	4.4	4.1	4.2
3. Model Increases Precision in Identifying Objectives	4.4	4.7	4.2	4.5
4. Model Relates Activities to Objectives	4.3	4.7	4.2	4.5
5. Model Will Improve Communication with Legislators	4.1	4.2	3.4	3.9
6. Model Will Promote Finding Better Ways of Teaching	4.0	4.2	3.9	4.0

NOTE: Indices were obtained by weighting responses as follows and then averaging:

Strongly Agree:	5 pts.
Agree:	4 pts.
No Opinion:	3 pts.
Disagree:	2 pts.
Strongly Disagree:	1 pt.

*These statements have been condensed from the original statements on the questionnaire.

RESEARCH

CORPORATION

Founded 1963

An Educational Research Organization
Incorporated Not for Profit
and a subsidiary of the

Association of School Business Officials
of the United States and Canada

AUG 1? 197?